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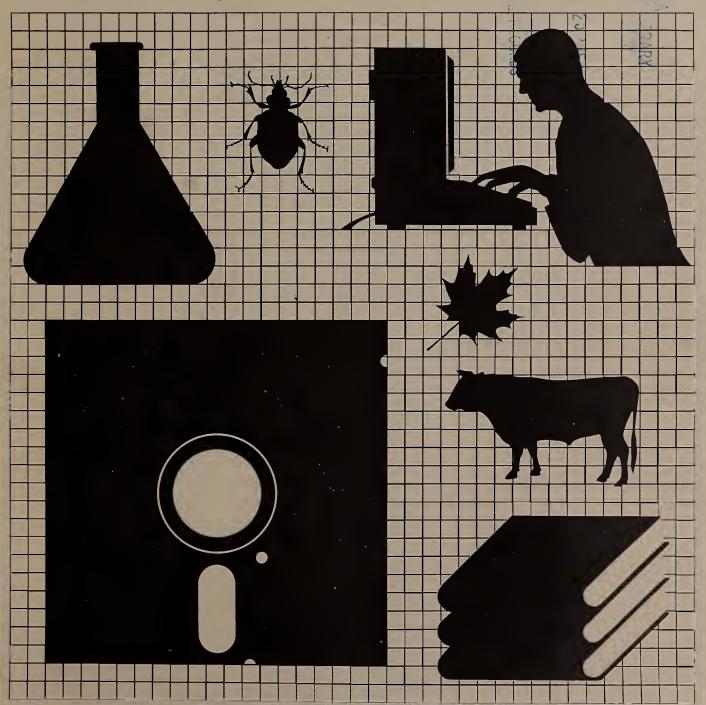


National / Agricultural Library

Bibliographies and Literature of Agriculture Number 44

# Bibliography of Agricultural Bibliographies, 1983

A Categorized Listing of Bibliographies Indexed in AGRICOLA





# Bibliography of Agricultural Bibliographies, 1983

A Categorized Listing of Bibliographies Indexed in AGRICOLA

Compiled By Charles N. Bebee National Agricultural Library

Bibliographies and Literature of Agriculture Number 44

United States Department of Agriculture National Agricultural Library Beltsville, Maryland 20705

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### **PREFACE**

In 1978, the National Agricultural Library introduced a publication series entitled "Bibliographies and Literature of Agriculture," with its first product being a Bibliography of Agricultural Bibliographies, 1977, as BLA-1. The second issue of Bibliography of Agricultural Bibliographies covered the years 1978-82 and was issued as BLA-32.

This issue, <u>Bibliography of Agricultural Bibliographies</u>, 1983, continues the series. All items are in English and were indexed during calendar year 1983.

Section headings or category codes from AGRICOLA have been converted to the latest equivalent code. Within each section the citations are arranged alphabetically by title. A personal author index appears following the categorized citations.

Any comments or questions may be forwarded to the compiler.

Charles N. Bebee USDA, National Agricultural Library Room 111 Beltsville, MD 20705 (301) 344-3704



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Energy and agriculture : a bibliographic guide to the microfiche collection / edited by Allene M. Goforth.

Goforth, Allene M. Sanford, N.C. Microfilming Corp. of America c1983. Guide to 1532 titles on 1816 microfiche (Fiche S-25) ~"A Current Research Topics publication.". ix, 152 p.; 28 cm. -. (NAL Call No.: S494.5.E5E52).

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Immunology of hypersensitivity pneumonitis (Farmer's lung disease).
Stankus, R.P.CRTXB. Morgan, J.E.; Salvaggio,

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Analysis of nitrogen isotope ratios by mass spectrometry (Soil analysis techniques). Haystead, A. New York: M. Dekker, c1983. Soil analysis: international techniques and related procedures / edited by Keith A. Smith. Literature review. p. 377-405. ill. Includes references. (NAL Call No.: S593.S742).

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Analysis of toxicants in agricultural environments.

Seiber, J.N. New York: Plenum Press, c1982. Genetic toxicology: an agricultural perspective / edited by Raymond A. Fleck and Alexander Hollaender. Literature review. p. 219-234. ill. 50 ref. (NAL Call No.: RA566.G44).

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Analytical methods for sulfonamides in foods and feeds. I. Review of methodology (Food hygiene, feed additives, chemical analysis). Horwitz, W.JANCA. Arlington: The Association. Journal of the Association of Offical Analytical Chemists. Jan 1981. Literature review. v. 64 (1). p. 104-130. ill. 94 ref. (NAL Call No.: 381 AS7).

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Carbamate pesticides (General chemistry, mode of action, environmental persistence, degradation and metabolic processes, residue analysis).

Ripley, B.D. Chau, A.S.Y. Boca Raton, Fla.: CRC Press, c1982. Analysis of pesticides in water / senior editor, A.S.Y. Chau, co-editor B.K. Afghan. Includes tabular data listing extraction, cleanup and analytical methods for various substrates ~Literature review. p. 1-82. ill. Includes references. (NAL Call No.: TP248.P47A49 V.3).

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Farming systems concepts arising from the TAC review and from personal experience (Research). Plucknett, D.L. Boulder, Colo.: Westview Press, 1982. Readings in farming systems research and development / edited by W.W. Shaner, P.F. Philipp, and W.R. Schmehl. p. 157-164. (NAL Call No.: S602.5.R4).

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Free sugars and sorbitol in fruits—a compilation from the literature (Fruits, composition, methods, chemical analysis). Wrolstad, R.E.JANCA. Shallenberger, R.S. Arlington: The Association. Journal of the Association of Offical Analytical Chemists. Jan 1981. Literature review. v. 64 (1). p. 91-103. 34 ref. (NAL Call No.: 381 AS7).

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Online databases relevant to agricultural economics.

Siess, J.A. Braden, J.B. Ames, Iowa, American Agricultural Economics Association. Extract: A new research tool--online database searching--has been developed in recent years to help cope with the information overflow. Online searching is the direct, interactive communication with a computer to fulfill specific requests for information. Databases are computer-readable files of recorded data. This paper identifies and describes fifty-two databases with potential use in agricultural economics. American journal of agricultural economics. Nov 1982. v. 64 (4). p. 761-767. Includes 25 references. (NAL Call No.: 280.8 J822).

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Organophosphorus pesticides (Sample preservation and storage, analytical techniques, gas-liquid chromatography). Chau, A.S.Y. Ripley, B.D.; Kawahara, F. Boca Raton, Fla.: CRC Press, c1982. Analysis of pesticides in water / senior editor, A.S.Y. Chau, co-editor B.K. Afghan. Includes a tabular bibliography for analysis of organophosphorus pesticides ~Literature review. p. 61-154. ill. Includes references. (NAL Call No.: TP248.P47A49 V.2).

### 0011

Overcoming design problems in evaluating health behavior programs.

Flay, Brian R. Best, J. Allan. Beverly Hills: Sage Publications. Abstract: The growing reliance of high quality evaluative research to health modification programs is discussed, as it relates to both the paucity of quality evalutions and research design issues. The failure to formulate the most appropriate evaluative research questions and research design deficiencies are stressed as 2 major explanations for the infrequency of controlled, interpretable evaluations. Some 13 research design issues are identified and addressed. These issues must be considered for proper solutions to be obtained from evaluative research questions. Solutions are offered to the identified problem areas and design recommendations are made that strive to minimize or eliminate design problems in evaluating health behavior programs. (wz).

Evaluation & the health professions. Mar 1982. Literature review. v. 5 (1). p. 43-69. Includes 45 references. (NAL Call No.: R11.E9 F&N).

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Plant dependent mutation assays.
Gentile, J.M. Plewa, M.J. New York: Plenum Press, c1982. Genetic toxicology: an agricultural perspective / edited by Raymond A. Fleck and Alexander Hollaender. Literature review. p. 327-352. 56 ref. (NAL Call No.: RA566.G44).

### 0013

Research for small farms: proceedings of the special symposium: invited papers presented at a symposium held November 15-18, 1981, at the Beltsville Agricultural Research Center, Beltsville, Maryland / Howard W. Kerr, Jr., and Lloyd Knutson, editors; sponsored by the Beltsville Agricultural Research Center, Northeastern Region, Agricultural Research Service, United States Department of Agriculture.

Kerr, Howard W.; (Howard William),; 1932-; Knutson, Lloyd V. Washington, D.C. U.S. Dept. of Agriculture, Agricultural Research Service (For sale by the Supt. of Docs., U.S. G.P.O. 1982). "Issued July 1982.". xi. 301 p.: ill.; 28 cm. -. Includes bibliographical references. (NAL Call No.: 1 Ag84M no.1422).

### 0014

Research technique for epidemiologic investigation of nutrition and cancer. Moore, Joan V.NUCAD. Prestridge, Laurel L.; Newell, Guy R. Philadelphia : Franklin Institute Press. Extract: There is evidence that diets may be stable over time due to deep-rooted habits; however, changes in eating behavior often are associated with life-syle or health-status changes. By using a diet-related life-event schedule, dietary changes resulting from life events may be more easily recalled and a more accurate characterization of diet patterns during neoplasm initiation may be made. (author/kbc). Nutrition and cancer. 1982. Literature review. v.3 (4). p. 249-256. charts. Includes 66 references. (NAL Call No.: RC262.C5N8).

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Selected annotated bibliography (Interdisciplinary research).

Russell, M.G. Cornwell, J. St. Paul: The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. (19). p. 175-183. (NAL Call No.: \$1.M52).

### 0016

A summary of research findings on the effects of light on plants.

Knox, G.W.ANURA. Hamilton, D.F. Chicago: American Nurseryman Publishing Co. American nurseryman. Mar 1, 1983. Literature review. v. 157 (5). p. 83-91. Includes references. (NAL Call No.: 80 AM371).

### 0017

Techniques for needs assessment.

Eash, Maurice J. New York : A.R. Liss, 1981. Abstract: Needs assessment (NA) methodologies, their strengths, weeknesses, biases, and use in program and project design are reviewed and evaluated. Requirements for NA as a starting point for project design have been developed only recently. Factors considered include: population sampling, instrumentation, data collection and time considerations, misidentified variants and variables, data analysis, and problems associated with inappropiate specifications and generalizations. One of the most critical (but negelected) techniques in NA is population sampling on a systematic basis. The most common instruments used in gathering NA data are questionnaires and interviews. Well-trained data collectors are essential; without this capability, the findings of a NA are suspect. In assessing populations, it is important to select informants having unusual knowledge of needs in order to surmount the problem of misidentifying variants and variables. The findings of a case study concerning the development of a new curriculum in nutrition education by a national nonprofit organization are presented to illustrate the application of NA techniques. (wz). Nutrition in the 1980's -- the constraints on our knowledge. Literature review. p. 399-410. Includes 12 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

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Toxicological procedures for assessing the carcinogenic potential of agricultural chemicals (including pesticides).

Krewski, D. Clayson, D.; Collins, B.; Munro, I.C. New York: Plenum Press, c1982. Genetic toxicology: an agricultural perspective / edited by Raymond A. Fleck and Alexander Hollaender. Literature review. p. 461-497. 88 ref. (NAL Call No.: RA566.G44).

### 0019

Trends in the chemistry and technology of lipids.

Boelhouwer, C.JJASD. Champaign: The Society. Journal of the American Oil Chemists' Society. Feb 1983. Literature review. v. 60 (2). p. 457-462. ill. Includes references. (NAL Call No.: 307.8 J82).

### (RESEARCH)

### 0020

The triazine herbicides (Properties, analytical procedures, sample collection, preservation, and preparation).

Raton, A.E. Muir, D.C.G.; Grover, R. Boca Raton, Fla.: CRC Press, c1982. Analysis of pesticides in water / senior editor, A.S.Y. Chau, co-editor B.K. Afghan. Includes tabules of common and chemical names, formulae, molecular weights and structures ~Literature review. p. 213-239. ill. Includes references. (NAL Call No.: TP248.P47A49 V.3).

# **GEOGRAPHY**

### 0021

State atlases: an annotated bibliography / by David A. Cobb and Peter B. Ives.
Cobb, David A., 1945. Ives, Peter B. Chicago, Ill. CPL Bibliographies (1983). "April 1983.".
21 p.; 28 cm. -. (NAL Call No.: Z690.A1C62 no.108).

# METEOROLOGY AND CLIMATOLOGY

### 0022

Acid precipitation: a bibliography: a compilation of worldwide literature.

Oak Ridge, Tenn. Technical Information Center, U.S. Dept. of Energy Springfield, Va. available from NTIS 1983. Cover title ~"April 1983. ~DOE/TIC-3399 ~DE83008750 ~Includes index. iii, 514, 211 p.: 28 cm. (NAL Call No.: Z5322.A25A25).

### 0023

Acid rain : impacts on agriculture, 1975-1982 / searched by Sheldon Cheney.
Cheney, Sheldon. Beltsville, Md. U.S. Dept. of Agriculture, National Agricultural Library 1983. Updates 81-29 ~January 1983 ~Includes index. 35 p. ; 28 cm. -. (NAL Call No.: aZ5071.N3 no.83-18).

### 0024

Agroclimatic modeling: an overview.
Baier, W. Boulder, Colo.: Westview Press, c1983. Agroclimate information for development: reviving the Green Revolution / editor by David F. Cusack. Literature review. p. 57-82. ill., map. 4 p. ref. (NAL Call No.: S600.45.A4).

### 0025

Annotated bibliography of remote sensing methods for monitoring desertification / by A.S. Walker and Charles J. Robinove. Walker, A. S. (Alta Sharon), 1942. Robinove, Charles Joseph,; 1931. Alexandria, VA U.S. Geological Survey 1981. iii, 25 p.; 26 cm. (NAL Call No.: Z6004.D4W3).

### 0026

Canopy temperature and crop water stress (Irrigation systems).

Jackson, R.D. New York: Academic Press. Advances in irrigation. 1982. Literature review. v. i. p. 43-85. ill. Includes references. (NAL Call No.: TC801.A34).

### 0027

Carbon dioxide and climate: a second assessment / report of the CO2/Climate Review Panel to the Climate Research Committee of the Climate Board/Committee on Atmospheric Sciences and the Carbon Dioxide Assessment Committee of the Climate Board, Commission on Physical Sciences, Mathematics, and Resources, National Research Council.

National Research Council ~ CO2/Climate Review

National Research Council ~ CO2/Climate Review Panel. Washington, D.C. National Academy Press 1982. xx, 72 p.: ill.; 23 cm. Bibliography: p. 65-72. (NAL Call No.: QC879.8.N37).

### 0028

Continental-scale variations in precipitation chemistry (Acid rain, USA).

Munger, J.W.ESTHAG. Eisenreich, S.J. Washington: American Chemical Society. Environmental science & technology. Jan 1983. Literature review. v. 17 (1). p. 32A-42A. maps. 107 ref. (NAL Call No.: TD42O.A1E5).

### 0029

Geographic research in the U.S. Geological Survey: bibliography, 1866-1980 / by Mary E. Graziani.
Graziani, Mary E. (Reston, Va.?) U.S. Dept. of the Interior, Geological Survey Alexandria, VA Free on application to Distribution Branch, Text Products Section, U.S. Geological Survey 1982. Includes indexes. 59 p.; 26 cm. -. (NAL Call No.: Z6001.G7).

### 0030

Pregermination treatments to increase cottonseed germination at suboptimal temperatures (Incubator, growth chamber and field experiments in New Mexico).

McCaslin, B.D. Fowler, J.L.; Centner, M.S. Las Cruces: The Station. Bulletin - New Mexico Agricultural Experiment Station. Apr 1982.

Literature review, 1897-1976. Apr 1982. (690).
36 p. ill. 43 ref. (NAL Call No.: 100 N465 (1)).

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Review of Late Quaternary history of vegetation and climate in the mountains of Colorado (Palynology, plant ecology).

Nichols, H. Boulder: The Institute. Occasional paper - Institute of Arctic and Alpine Research, University of Colorado. 1982. Literature review. 1982. (37). p. 27-33. maps. 18 ref. (NAL Call No.: QC994.8.C6).

### 0032

A review of the phytogeographic evidences for Pleistocene climate changes in the Neotropics. Prance, G.T.AMBGA. St. Louis: The Garden. Annals of the Missouri Botanical Garden. 1982. Presented at the symposium Plant Geographical Results of Changing Cenozoic Barriers at the XII International Botanical Congress in Sydney Australia, 1981 ~Literature review. v. 69 (3). p. 594-624. maps. Includes references. (NAL Call No.: 451 M69).

# **HISTORY**

### 0033

American folk architecture : a selected bibliography / by Howard Wight Marshall ; with the assistance of Cheryl Gorn and Marsha Maguire.

Marshall, Howard Wright. Gorn, Cheryl.; Maguire, Marsha. (Washington, D.C.) American Folklife Center, Library of Congress 1981. xiii, 79 p.; 28 cm. -. (NAL Call No.: Z5944.U5M38).

### 0034

Grass carp status in the United States: a review (Ctenopharyngodon idella, biological control agents for nuisance aquatic weeds, sport fishing).

Pierce, B.A.EMNGD. New York: Springer International. Environmental management. Mar 1983. Literature review. v. 7 (2). p. 151-160. ill. Includes references. (NAL Call No.: HC79.E5E5).

### 0035

A history of the crown gall problem (Neoplastic disease of plants).

Braun, A.C. New York: Academic Press, c1982.

Molecular biology of plant tumors / edited by

Molecular biology of plant tumors / edited by Gunter Kanl and Josef S. Schell. Literature review. p. 155-210. 8 p. ref. (NAL Call No.: SB741.5.M64).

### 0036

Index of generic names of fossil plants, 1974-1978: based on the Compendium index of paleobotany of the U.S. Geological Survey / by Arthur D. Watt.

Watt, Arthur D., 1921. Blazer, Anna M.; Index of generic names of fossil plants, 1966-1973. Washington (D.C.) U.S. G.P.O. 1982. Supplements Index of generic names of fossil plants, 1820-1965, by H. N. Andrews and Index of generic names of fossil plants, 1966-1973, by A. M. Blazer (407 G29B no. 1396). iii, 63 p.; 24 cm. -. Bibliography: p. 43-63. (NAL Call No.: 407 G29B no.1517).

### 0037

Jesuit enterprise in colonial Latin America: a review essay (Historic aspects of economics, development and rural sociology).

Bauer, A.J.AGAIA. Berkeley: University of California Press. Agricultural history. Jan 1983. Literature review. v. 57 (1). p. 90-104. Includes references. (NAL Call No.: 30.98 AG8).

### 0038

Review of the etiology and pathogenesis of byssinosis: historical perspective (Cotton dust, causative agent).

Jacobs, R.R.BCOPB. Memphis: National Cotton Council and The Cotton Foundation. Proceedings - Beltwide Cotton Production Research Conferences. 1983. Paper presented at the 7th Cotton Dust Research Conference, San Antonio, Texas, Jan. 3-4, 1983. 1983. (7th). p. 7-10. Includes references. (NAL Call No.: SB249.N6).

### 0039

Seventy years of the Maillard reaction (Louis Camille Maillard, 1878-1936, Food Chemistry, France).

Kawamura, S.ACSMC. Washington: The Society. ACS Symposium series - American Chemical Society. 1983. Literature review. 1983. (215). p. 3-18. Includes references. (NAL Call No.: OD1.A45).

### 0040

Utah plant types--historical perspective 1840 to 1981--annotated list, and bibliography. Welsh, S.L.GRBNA. Provo: Brigham Young University. The Great Basin naturalist. June 30, 1982. Literature review. v. 42 (2). p. 129-195. ill. 10 p. ref. (NAL Call No.: 410 G79).

# EDUCATION, EXTENSION, AND ADVISORY WORK

### 0041

The land-grant colleges: a selective historical bibliography and legislative chronology / compiled by: Alan Fusonie, Marilyn Jacobs.
Fusonie, Alan. Jacobs, Marilyn. Beltsville, Md. Historical Program, National Agricultural Library 1983. 26 p.; 28 cm. (NAL Call No.: aZ5814.U7F8).

# EDUCATION AND TRAINING NOT EXTENSION

### 0042

Computer-assisted instruction: A discussion of some of the issues for would-be implementors. Holmes, Glyn. Englewood Cliffs: Educational Technology Publications, Inc. Abstract: Implementation of computer-assisted instruction (CAI) requires forethought and knowledge related to the capabilities of various systems and the steps needed prior to undertaking or investing in any products or services. A basic question to ask is, why implement? Improving student performance beyond what is accomplished with traditional teaching instruction is one reason. Improved student motivation is another, as is assisting the teacher in the teaching/learning process. However, cost must be evaluated against the effect which is usually done on an institutional basis. Choice of system, personnel attitudes, administrative, and student support must be considered when implementation is being studied. Integration of CAI with the curriculum is necessary to assure that all elements of the teaching/learning system are viewed as an entity consisting of independent parts. Finally, appropriate courseware (software for instruction) must be available if the whole system is to function adequately. (kbc). Educational technology. Sept 1982. Literature review. v. 22 (9). p. 7-13. ill. Includes 43 references. (NAL Call No.: L11.E32 F&N).

### 0043

International human nutrition research / prepared by the Joint Subcommittee on Human Nutrition Reseach of the Committee on Health and Medicine and the Committee on Food, Agriculture, and Forestry Research, Federal Coordinating Council on Science, Engineering, and Technology, Office of Science and Technology Policy, Executive Office of the President.

Bethesda, Md. The Subcommittee 1982. Abstract: A comprehensive review of Federal programs in international nutrition research is presented. The 3 sections of the report are: a description of Federal programs in international human nutrition research; Critical issues in international nutrition research and education; and recommendations. Agencies involved in research projects include the following: Department of Health and Human Services, Department of Defense, Agency for International Development, National Science Foundation, and the United States Department of Agriculture. Appendices list the subcommittee membership, the definition of human nutrition research, and tables of expenditures by Federal agencies for human nutrition research. (rkm). "PB82-231739.". x11, 80 p.; 28 cm. -. (NAL Call No.: TX367.I48 F&N E-3891).

### 0044

Nutrition education research and professional personnel needs for nutrition education of professionals and the public / prepared by the Joint Subcommittee on Human Nutrition Research of the Committee on Health and Medicine and the Committee on Food, Agriculture, and Forestry Research, Federal Coordinating Council on Science, Engineering, and Technology, Office of Science and Technology Policy, Executive Office of the President.

Bethesda, Md. The Subcommittee 1982. Abstract: A comprehensive review of federal nutrition education covers areas of need, including research aspects and training of professional personnel. The 4 sections of the report are: an overview of Federal nutrition education research expenditures for FY 1980 and a review of FY 1977-1980 activities; a description of manpower needs for nutrition education of professionals and the public; a discussion and analysis of the issues; and conclusions and recommendations regarding nutrition education research and personnel needs. DHHS and USDA programs for nutrition education (of the public) are described in the appendix. (rkm). "PB82-231747.". xii, 76 p.; 28 cm. -. (NAL Call No.: TX367.N87 F&N E-3888).

### 0045

Responses of horticultural commodities to modified atmospheres: an overview of published literature and future research needs.

Kader, A.A. Beaverton, Or.: Timber Press, (1982). Proc. Third Natl. Controlled Atmosphere Research Conf. on Controlled Atmospheres for Storage and Transport of Perishable-Agric. Commodities, July 22-24, 1981, Ore. State Univ., Corvallis / D.G. Richardson, M.M.

Meheriuk, eds. p. 229-233. 4 ref. (NAL Call No.: TP373.3.C66 1982).

# EXTENSION AND ADVISORY WORK NON US

### 0046

Extension plant pathology: challenges and opportunities.

Jacobsen, B.J.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 137-152. Includes references. (NAL Call No.: 464.8 AN72).

### 0047

Microcomputer software development and distribution.

McGrann, J.M. Lexington, Ky., Southern Agricultural Economics Assoc. Extract: The microcomputer is becoming an important tool to facilitate the land grant institution in extension and research activities in agriculture. Realizing this technology's full potential requires software development and distribution as well as user education. A survey of farm management specialists in the Southern Region indicated that 9 out of 13 states distribute microcomputer software and that the agricultural economics profession has a leadership role in microcomputer application activities. Regional cooperation is needed in software development, distribution and a means to publish peer reviews in a journal-type publication similar to other professional activities. Southern journal of agricultural economics - Southern Agricultural Economics Association. July 1983. v. 15 (1). p. 21-25. Includes 13 references. (NAL Call No.: HD101.S6).

# U.S. EXTENSION SERVICES

### 0048

Pesticide in-service training for Ohio Extension faculty / William F. Lyon.
Lyon, William F., 1937. Columbus Ohio State University 1983. Caption title ~Pesticide Applicator Training collection ~"January 6-7, 1983.". 6 p.; 28 cm. (NAL Call No.: SB950.73.U52033).

# **LEGISLATION**

### 0049

Nutritional quackery (USA, food fads). Young, J.H.QBAOD. Philadelphia: The Association. Quarterly bulletin - Association of Food and Drug Officials. Jan 1983. Literature review. v. 47 (1). p. 3-11. 48 ref. (NAL Call No.: 389.9 AS70).

### 0050

Organization and well-being of the farming industry: reflections on the Agriculture and Food Act of 1981.

Johnson, J. Clayton, K. Ames, Iowa, American Agricultural Economics Association, Extract: This paper considers the implications that the 1981 act holds for the organization and well-being of U.S. agriculture. The paper begins with definitions of farm organization and well-being. A brief review of pertinent research follows to establish a few of the more important precedents. Next, the 1981 act's major provisions are highlighted and a general assessment of their likely affect on the farm sector is given. Finally, an analytical evaluation of the implications of the 1981 act for U.S. agriculture is provided. American journal of agricultural economics. Dec 1982. v. 64 (5). p. 947-956. Includes 18 references. (NAL Call No.: 280.8 J822).

### 0051

The OSHA (Occupational Safety and Health Administration) cotton dust standard (United States).

Strobel, G.A.BCOPB. Memphis: National Cotton Council and The Cotton Foundation. Proceedings - Beltwide Cotton Production Research Conferences. 1983. Paper presented at the 7th Cotton Dust Research Conference, San Antonio, Texas, Jan. 3-4, 1983. 1983. (7th). p. 4-6. (NAL Call No.: SB249.N6).

### 0052

Prairie wetland drainage regulations: discussion and annotated bibliography (Legislation, Minnesota, North Dakota, South Dakota).

Leitch, J.A.NDKRA. Saxowsky, D.M.; Nelson, W.C.; Ogaard, L.A.; Scott, D.F. Fargo: The Station. North Dakota research report - North Dakota Agricultural Experiment Station. July 1981. July 1981. (83). 10 p. Includes references. (NAL Call No.: 100 N813R).

### 0053

The Southern Ocean in the 1980s (Fish, krill, oil and gas reserves, marine resources, treaties, Antarctica).

Mitchell, B. Chicago: University of Chicago Press. Ocean yearbook. 1982. Literature review. 1982. (3). p. 349-385. maps. Includes

references. (NAL Call No.: GC1.033).

### 0054

The United States Food and Drug Administration--purpose, history and function / Janice Dee Gilbert. Gilbert, Janice Dee. Monticello, Ill. Vance Bibliographies 1982. Cover title ~"April 1982.". 13 p.; 28 cm. -. (NAL Call No.: Z7914.F63G54).

# ECONOMICS, DEVELOPMENT, RURAL SOCIOLOGY

### 0055

Jesuit enterprise in colonial Latin America: a review essay (Historic aspects of economics, development and rural sociology).

Bauer, A.J.AGAIA. Berkeley: University of California Press. Agricultural history. Jan 1983. Literature review. v. 57 (1). p. 90-104. Includes references. (NAL Call No.: 30.98 AG8).

# **ECONOMICS**

### 0056

Changes in mechanical and plant technology: the Corn Belt, 1910-1940.

Bogue, A.G. Wilmington : Economic History Association at North Carolina State University. Extract: During the period 1910-1940 some changes were occurring in the production practices of the Corn Belt. Three of the most important were the substitution of the tractor for horse power, the introduction of hybrid seed corn, and the development of viable mechanical picker-huskers for harvesting corn. This paper examines the background of those innovations, evaluates current assumptions about them, presents data concerning the relative per acre savings or additional income involved in adoption, and notes the possibility that assumptions about the economic rationality involved in corn improvement research, as well as the implications of the "dry hole effect," may require some revision. The Journal of economic history. Mar 1983. v. 43 (1). p. 1-25. Includes 33 references. (NAL Call No.: 277.8 J822).

### 0057

Economics of forest tract size: theory and literature.

Cubbage, F. New Orleans: The Station. Forest Service general technical report SO - United States, Southern Forest Experiment Station. Feb 1983. Feb 1983. (SO-41). 21 p. ill. Includes references. (NAL Call No.: aSD11.U57).

### 0058

Home economic conditions and the decision to migrate: new evidence for the U.S. labor force. Schlottmann, A.M.SECJA. Herzog, H.W. Jr. Chapel Hill, Southern Economic Association. Extract: In this paper, several factors relating to the design of the research population often suggested by the literature but rarely incorporated due to data limitations are explicitly recognized. The conjecture that home economic conditions are insignificant determinants of the decision to migrate is not supported by our empirical results. Southern economic journal. Apr 1982. v. 48 (4), p. 950-961. Includes 25 references. (NAL Call No.: 280.8 \$084).

### 0059

Microcomputer software development and distribution.

McGrann, J.M. Lexington, Ky., Southern Agricultural Economics Assoc. Extract: The microcomputer is becoming an important tool to facilitate the land grant institution in extension and research activities in agriculture. Realizing this technology's full potential requires software development and distribution as well as user education. A survey of farm management specialists in the Southern Region indicated that 9 out of 13

states distribute microcomputer software and that the agricultural economics profession has a leadership role in microcomputer application activities. Regional cooperation is needed in software development, distribution and a means to publish peer reviews in a journal-type publication similar to other professional activities. Southern journal of agricultural economics - Southern Agricultural Economics Association. July 1983. v. 15 (1). p. 21-25. Includes 13 references. (NAL Call No.: HD101.56).

### 0060

Online databases relevant to agricultural economics.

Siess, J.A. Braden, J.B. Ames, Iowa, American Agricultural Economics Association. Extract: A new research tool--online database searching--has been developed in recent years to help cope with the information overflow. Online searching is the direct, interactive communication with a computer to fulfill specific requests for information. Databases are computer-readable files of recorded data. This paper identifies and describes fifty-two databases with potential use in agricultural economics. American journal of agricultural economics. Nov 1982. v. 64 (4), p. 761-767. Includes 25 references. (NAL Call No.: 280.8 J822).

### 0061

Organization and well-being of the farming industry: reflections on the Agriculture and Food Act of 1981.

Johnson, J. Clayton, K. Ames, Iowa, American Agricultural Economics Association. Extract: This paper considers the implications that the 1981 act holds for the organization and well-being of U.S. agriculture. The paper begins with definitions of farm organization and well-being. A brief review of pertinent research follows to establish a few of the more important precedents. Next, the 1981 act's major provisions are highlighted and a general assessment of their likely affect on the farm sector is given. Finally, an analytical evaluation of the implications of the 1981 act for U.S. agriculture is provided. American journal of agricultural economics. Dec 1982. v. 64 (5). p. 947-956. Includes 18 references. (NAL Call No.: 280.8 J822).

### 0062

Outlook '82: Agricultural Outlook Conference, Nov. 2-5, 1981. Washington, D.C.: proceedings / United States Department of Agriculture. Washington, D.C. U.S. G.P.O. 1981. Abstract: Papers by participants of the USDA Outlook Conference (November 1981) are presented. Papers are categorized in 36 topics that include: economic outlook; agricultural outlook; textiles and clothing; feed grains; support network; dairy production; oilseeds;

sweeteners and tropical products; credit; food supplies and prices; nutrition initiatives for the 80's; land and water issues; potentials for growth; information delivery systems; and policy for the 80's. Nutrition initiatives papers are: nutrition policy; nutrition research; the Extension Service; and, nutrition education. (rkm). Cover title ~Earlier conferences called: National Agricultural Outlook Conferences. v, 718 p.: ill., maps; 28 cm. Includes bibliographical references. (NAL Call No.: HD1755.A38 1981 F&N B-3232).

### 0063

Planning policies, strategies, and performance in the agricultural sector of developing countries: a selected annotated bibliography / Akhtar Husain Siddiqi.
Siddiqi, Akhtar Husain. Monticello, Ill. Post Office Box 229, Monticello 61856 Vance Bibliographies (1982). Cover title ~"June 1982.". 42 p.; 28 cm. -. (NAL Call No.: 25071.547).

Political economic markets: PERTS (Political

### 0064

Economic Resource Transactions) and PESTS (Political Economic-Seeking Transfers) in food and agriculture. Rausser, G.C. Ames, Iowa, American Agricultural Economics Association. Extract: The principal theme of this paper is that our research paradigm must expand if we wish to make a significant difference in actual policy analysis, selection, and implementation. A more pragmatic perspective is required which explicitly recognizes the nonseparability of political and economic markets, the nonexistence of pure transfers, and the second-best world in which we live. American journal of agricultural economics. Dec 1982. v. 64 (5). p. 821-833. Includes 41 references. (NAL Call No.: 280.8 J822).

### 0065

Production agriculture as a force affecting the food system.

French, B.C. Carman, H.F. Ames, Iowa: Iowa
State University Press, 1983. Future frontiers in agricultural marketing research / edited by Paul L. Farris. Literature review. p. 54-77. Includes references. (NAL Call No.: HD9000.5.F82 1983).

### 0086

Tax incidence: a selected bibliography / by Heather Barrera.
Barrera, Heather. Chicago, Ill. CPL
Bibliographies 1983. "April 1983. ~Includes index. viii, 67 p.; 28 cm. -. (NAL Call No.: Z690.A1C62 no.109).

### 0067

World product and income: a review article. Theil, H.JLPEA. Chicago, University of Chicago Press. Extract: Kravis, Heston, and Summers provided comparable price and volume data for gross domestic product and its components for each of 34 countries, varying in affluence from India and Malawi to the United States. The article discusses the data and the way in which they are generated, and considers the use of these data for applied demand analysis. Journal of political economy. June 1983. v. 91 (3). p. 505-517. Includes 18 references. (NAL Call No.: 280.8 J82).

# LAND ECONOMICS

### 0068

Economics of agricultural erosion and sedimentation -- a selected literature review. Dickason, C. Piper, D. Washington, D.C.: The Service. Extract: This study reviews selected literature from 1972 to 1981 dealing with economic analyses of alternative erosion and sedimentation control measures on agricultural lands. Fifty-four publications are reviewed with respect to their applicability in the economic evaluation of erosion and sedimentation in selected small areas. Those publications which were found to be the most helpful are more fully discussed in five study applications subsections which appear at the end of the major sections. The review was organized into seven major sections: introduction, related literature reviews. onfarm analysis, small area analysis, large area analysis, other studies, and conclusions and recommendations. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Apr 1983. Available from NTIS, order no. PB83-209213 ~Literature review. Apr 1983. (AGES830328). 52 p. Includes 54 references. (NAL Call No.: 916762(AGE)).

of nonpoint-source pollution. This debate is sharpened by the goals to reduce nonpoint-source pollution. What follows is a review of research on farmers' attitudes about the control of nonpoint pollution through soil conservation and other practices. Journal of soil and water conservation. Jan-Feb 1983. v. 38 (1). p. 15-20. Includes 40 references. (NAL Call No.: 56.8 J822).

### 0069

An examination of land use--nutrient export relationships (Phosphorus, nonpoint source pollution, agricultural, forest, urban, watershed).

Beaulac, M.N.WARBA. Reckhow, K.H. Minneapolis: American Water Resources Association. Water resources bulletin. Dec 1982. Literature review. v. 18 (6). p. 1013-1024. ill. 3 p. ref. (NAL Call No.: 292.9 AM34).

### 0070

History of urban planning in the United States: an annotated bibliography / by Martin Gellen. Gellen, Martin. Chicago, Ill. CPL Bibliographies 1983. "March 1983.". 23 p.; 28 cm. -. (NAL Call No.: Z690.A1C62 no.107).

### 0071

Land use capability analysis: a selected bibliography / Jerry E. Green.
Green, Jerry E. Monticello, Ill. Vance
Bibliographies 1982. Cover title ~"November 1982.". 14 p.; 29 cm. -. (NAL Call No.: 27164.L3G74).

### 0072

Soil conservation and water quality improvement: what farmers think.
Christensen, L.A.JSWCA. Norris, P.E. Ankeny, IA: Soil Conservation Society of America.
Extract: Debate continues in the American agricultural community over policy for achieving soil conservation and the reduction

# ECONOMICS OF AGRIC. PRODUCTION

### 0073

The commodity futures market, 1979-1982 / searched by Maria Pisa.
Pisa, Maria. Beltsville, Md. U.S. Dept. of Agriculture, National Agricultural Library 1983. January 1983 ~Includes index. 31 p.; 28 cm. -. (NAL Call No.: aZ5071.N3 no.83-15).

# FARM ORGANIZATION AND MANAGEMENT

### 0074

Farming systems research: issues in research strategy and technology design. Byerlee, D. Harrington, L.; Winkelmann, D.L. Ames, Iowa, American Agricultural Economics Association, Extract: In this paper, we discuss Farming Systems Research which has the following characteristics: (a) It aims to generate technology to increase resource productivity for an identified group of farmers, especially in the short term. (b) It is conceptually based on a farming systems perspective. (c) It uses on-farm research methods. Taking the viewpoint of national agricultural research programs, we argue that this specific subset of research activities should receive priority in efforts to improve the effectiveness of agricultural research. American journal of agricultural economics. Dec 1982. v. 64 (5). p. 897-904. Includes 15 references. (NAL Call No.: 280.8 J822).

### 0075

Predicting crop production as related to plant water stress (Field crops, farm management).
Hanks, R.J.ADAGA. Rasmussen, V.P. New York:
Academic Press. Advances in agronomy. 1982.
Literature review. V. 35. p. 193-215. ill. 2 p. ref. (NAL Call No.: 30 AD9).

### 0076

Research for small farms : proceedings of the special symposium : invited papers presented at a symposium held November 15-18, 1981, at the Beltsville Agricultural Research Center, Beltsville, Maryland / Howard W. Kerr, Jr., and Lloyd Knutson, editors; sponsored by the Beltsville Agricultural Research Center, Northeastern Region, Agricultural Research Service, United States Department of Agriculture. Kerr, Howard W.; (Howard William),; 1932-; Knutson, Lloyd V. Washington, D.C. U.S. Dept. of Agriculture, Agricultural Research Service (For sale by the Supt. of Docs., U.S. G.P.O. 1982). "Issued July 1982.". xi, 301 p. : ill.; 28 cm. -. Includes bibliographical references. (NAL Call No.: 1 Ag84M no.1422).

# INTERNATIONAL DEVELOPMENT AID, AIMS, POLICIES, PROGRAMS

0077

Health maintenance through food and nutrition : a guide to information sources / Helen D. Ullrich. Ullrich, Helen D. Detroit, Mich. Gale Research Co. c1981. Abstract: An annotated bibliography for nonprofessionals and professionals identifies sources which will provide scientific information about food and nutrition; journal articles, books, pamphlets. leaflets, reports, and teaching aids are listed for each subject. The first of 3 parts covers different aspects of motivation: basic information; nutrients and functions; growth and development; applied conditions (obesity, athletics, dental health, vegetarianism); and clinical nutrition (diet therapy, alcoholism, cancer, diabetes, etc.). A second part covers food as it relates to health. Topics include: general foods; fabricated foods; food composition; world food supply; food preservation and storage; and additives, adulterants, and contaminants. Finally, part 3 deals with individuals and groups: consumers (education, regulations, programs, advertising. surveys); professional and paraprofessional training; government regulations and food programs; bibliographies and information resources. (rkm). Includes indexes. xx, 305 p. ; 23 cm. -. (NAL Call No.: Z6663.N9U44 F&N B-3249).

# U.S. FOOD AND NUTRITION PROGRAMS

### 0078

International human nutrition research / prepared by the Joint Subcommittee on Human Nutrition Reseach of the Committee on Health and Medicine and the Committee on Food, Agriculture, and Forestry Research, Federal Coordinating Council on Science, Engineering, and Technology, Office of Science and Technology Policy, Executive Office of the President.

Bethesda, Md. The Subcommittee 1982. Abstract: A comprehensive review of Federal programs in international nutrition research is presented. The 3 sections of the report are: a description of Federal programs in international human nutrition research; critical issues in international nutrition research and education; and recommendations. Agencies involved in research projects include the following: Department of Health and Human Services, Department of Defense, Agency for International Development, National Science Foundation, and the United States Department of Agriculture. Appendices list the subcommittee membership. the definition of human nutrition research, and tables of expenditures by Federal agencies for human nutrition research. (rkm). "PB82-231739.". xii, 80 p.; 28 cm. -. (NAL Call No.: TX367.I48 F&N E-3891).

### 0079

Nutrition education research and professional personnel needs for nutrition education of professionals and the public / prepared by the Joint Subcommittee on Human Nutrition Research of the Committee on Health and Medicine and the Committee on Food, Agriculture, and Forestry Research, Federal Coordinating Council on Science, Engineering, and Technology, Office of Science and Technology Policy, Executive Office of the President.

Bethesda, Md. The Subcommittee 1982. Abstract: A comprehensive review of federal nutrition education covers areas of need, including research aspects and training of professional personnel. The 4 sections of the report are: an overview of Federal nutrition education research expenditures for FY 1980 and a review of FY 1977-1980 activities; a description of manpower needs for nutrition education of professionals and the public; a discussion and analysis of the issues; and conclusions and recommendations regarding nutrition education research and personnel needs. DHHS and USDA programs for nutrition education (of the public) are described in the appendix. (rkm). "PB82-231747.". xii, 76 p. ; 28 cm. -. (NAL Call No.: TX367.N87 F&N E-3888).

# **RURAL SOCIOLOGY**

### 0080

Public relations and the rural library: a bibliography.
Quadri, N. Clarion: Center for the Study of Rural Librarianship, Clarion State College.
Rural libraries. 1982. v. 2 (2). p. 103-124.
(NAL Call No.: Z675.V7R8).

### 0081

Rural crime, rural criminals, rural delinquents: past research and future directions.
Warner, J.R. dr. Washington, D.C.: U.S. Dept. of Justice, National Institute of Justice, 1982, c1981. Criminal justice in rural America / senior editor Shanler D. Cronk; associate editors Joanne Jankovic. Literature review. p. 5-21, 23-28. ill. 4 p. ref. (NAL Call No.: HV6435.C7).

# **RURAL DEVELOPMENT**

### 0082

Objective quality of life in rural America: a selected bibliography / Kenneth R. Tremblay, Ur.
Tremblay, Kenneth R. Monticello, Ill. Vance Bibliographies 1982. Cover title. 8 p.; 28 cm. -. (NAL Call No.: Z7165.U5T7).

# **RURAL COMMUNITY SERVICES**

# 0083

The impact of conditions in the municipal bond market on community services and facilities : a synthesis and annotated bibliography / Gerry H. Williams.

Williams, Gerry H. Mississippi State, Miss. Southern Rural Development Center (1982). "This synthesis and bibliography is a product of a contractural agreement between the Southern Rural Development Center and the U.S. Department of Agriculture--Cooperative Research funded under grant number 70-59-2281-1-2-133-1.". iii, 75 p.; 28 cm. -. Bibliography: p. (11)-70. (NAL Call No.: HG4952.W53).

# 0084

Objective quality of life in rural America : a selected bibliography / Kenneth R. Tremblay, Jr.

Tremblay, Kenneth R. Monticello, Ill. Vance Bibliographies 1982. Cover title. 8 p.; 28 cm. -. (NAL Call No.: Z7165.U5T7).

# 0085

Research on rural criminal justice: a summary. Eisenstein, J. Washington, D.C.: U.S. Dept. of Justice, National Institute of Justice, 1982, c1981. Criminal justice in rural America / senior editor Shanler D. Cronk; associate editors Joanne Jankovic. Literature review. p. 105-131, 133-143. Includes ref. (NAL Call No.: HV6435.C7).

# DISTRIBUTION AND MARKETING

# 0086

The commodity futures market, 1979-1982 / searched by Maria Pisa.
Pisa, Maria. Beltsville, Md. U.S. Dept. of Agriculture, National Agricultural Library 1983. January 1983 ~Includes index. 31 p.; 28 cm. -. (NAL Call No.: aZ5071.N3 no.83-15).

#### 0087

The Food industry: Charting a course to the year 2000.

Fennema, Owen. FOTEA. Chicago: Institute of Food Technologists. Abstract: A literature review identifies 7 issues that are likely to influence the food industry in the future: 1) cost and availability of resources; 2) cost of waste disposal and pollution control; 3) the general economic situation; 4) demographics; 5) government policies and regulations; 6) management policies and practices; and 7) consumer attitudes and practices. Each of these issues is explained in more detail to highlight the major impact areas. In order to survive to the year 2000, food firms must recognize these identifiable factors that govern long-term changes in foods, food processes, and the food industry. (kbc). Food technology. Jan 1983. Literature review. v. 37 (1). p. 46, 48-52, 62. ill., charts. Includes 31 references. (NAL Call No.: 389.8 F7398).

# 0088

Impacts of relative price changes of feeds and cattle on the marketing of U.S. beef, 1975-1981: annotated bibliography of publications from the Western Regional Beef Research Project W-145 / edited by C. Richard Shumway and William D. Gorman. -.
Shumway, Charles Richard.; Gorman, William D. Las Cruces: New Mexico State University, Agricultural Experiment Station 1982. Cover title ~"December 1982.". vi, 58 p.; 28 cm. -. (NAL Call No.: 100 N465R no.500).

# 0089

Reducing equine hauling stress: a review (Transport).

Cregier, S.E. Wildomar: W. E. Jones. Journal of equine veterinary science. Nov/Dec 1982. Literature review. v. 2 (6), p. 187-198. ill. Includes references. (NAL Call No.: SF951.J65).

# PLANT SCIENCE

# 0090

Bibliography of Iowa aquatic and wetland plant literature.

Peck, J.H.PIAIA. Roosa, D.M. Cedar Falls: The Academy. The Proceedings of the Iowa Academy of Science. June 1983. Bibliography. v. 90 (2). p. 74-77. (NAL Call No.: 500 IO93).

# 0091

**Documenting** and evaluating herbal remedies (Ethnobotany).

Croom, E.M. Jr.ECBOA. New York: New York Botanical Garden. Economic botany. Jan/Mar 1983. Literature review. v. 37 (1). p. 13-27. Includes references. (NAL Call No.: 450 EC7).

#### 0092

Economic aspects of the Malvaceae in Australia (Uses).

Mitchell, A.S. Bronx: New York Botanical Garden. Economic botany. July/Sept 1982. Literature review. v. 36 (3). p. 313-322. 112 ref. (NAL Call No.: 450 EC7).

# 0093

Index of generic names of fossil plants, 1974-1978: based on the Compendium index of paleobotany of the U.S. Geological Survey / by Arthur D. Watt.

Watt, Arthur D., 1921. Blazer, Anna M.; Index of generic names of fossil plants, 1966-1973. Washington (D.C.) U.S. G.P.D. 1982. Supplements Index of generic names of fossil plants, 1820-1965, by H. N. Andrews and Index of generic names of fossil plants, 1966-1973, by A. M. Blazer (407 G29B no. 1396). iii, 63 p.; 24 cm. -. Bibliography: p. 43-63. (NAL Call No.: 407 G29B no.1517).

# 0094

Parallel usage of medicinal plants by Africans and their Caribbean descendants.

McClure, S.A. Bronx: New York Botanical Garden. Economic botany. July/Sept 1982.
Literature review. v. 36 (3). p. 291-301. 3 p. ref. (NAL Call No.: 450 EC7).

# 0095

Recent literature on hepatics and anthocerotes. 95.

Stotler, R.E.BRYOA. Crandall-Stotler, B. Carbondale: American Bryological and Lichenological Society. The Bryologist. Fall 1982. v. 85 (3). p. 337-341. (NAL Call No.: 450 B84).

# 0096

Recent literature on hepatics and anthocerotes. 96.

Stotler, R.E.BRYOA. Crandall-Stotler, B. Carbondale: American Bryological and Lichenological Society. The Bryologist. Winter 1982. Bibliography. Winter 1982. v. 85 (4). p. 451-455. (NAL Call No.: 450 B84).

#### 0097

Recent literature on hepatics and anthocerotes. 97.

Stotler, R.E.BRYOA. Crandall-Stotler, B. Carbondale: American Bryological and Lichenological Society. The Bryologist. Spring 1983. Bibliography. v. 86 (1). p. 74-80. (NAL Call No.: 450 B84).

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Recent literature on hepatics and anthrocerotes. 94.

Stotler, R.E.BRYOA. Crandall-Stotler, B. Carbondale: American Bryological and Lichenological Society. The Bryologist. Summer 1982. v. 85 (2). p. 258-265. (NAL Call No.: 450 B84).

# 0099

Recent literature on hepatics and antocerotes.

Stotler, R.E.BRYOA. Crandall-Stotler, B. Carbondale: American Bryological and Lichenological Society. The Bryologist. Summer 1983. Bibliography. v. 86 (2). p. 163-168. (NAL Call No.: 450 B84).

# 0100

Recent literature on lichens. 112. Egan, R.S.BRYOA. Carbondale: American Bryological and Lichenological Society. The Bryologist. Summer 1982. v. 85 (2). p. 266-273. (NAL Call No.: 450 B84).

# 0101

Recent literature on lichens. 113. Egan, R.S.BRYOA. Carbondale: American Bryological and Lichenological Society. The Bryologist. Fall 1982. v. 85 (3). p. 342-348. (NAL Call No.: 450 B84).

# (PLANT SCIENCE)

#### 0102

Recent literature on lichens. 114.

Egan, R.S.BRYOA. Carbondale: American

Bryological and Lichenological Society. The

Bryologist. Winter 1982. Bibliography. Winter

1982. v. 85 (4). p. 456-462. (NAL Call No.: 450

B84).

#### 0103

Recent literature on lichens. 115. Egan, R.S.BRYOA. Carbondale: American Bryological and Lichenological Society. The Bryologist. Spring 1983. Bibliography. v. 86 (1). p. 81-87. (NAL Call No.: 450 B84).

# 0104

Recent literature on lichens. 116. Egan, R.S.BRYOA. Carbondale: American Bryological and Lichenological Society. The Bryologist. Summer 1983. Bibliography. v. 86 (2). p. 169-175. (NAL Call No.: 450 B84).

# 0105

Recent literature on mosses. 122. Crosby, M.R.BRYOA. Bauer, C.R. Carbondale: American Bryological and Lichenological Society. The Bryologist. Fall 1982. v. 85 (3). p. 349-357. (NAL Call No.: 450 B84).

# 0106

Recent literature on mosses. 123.
Crosby, M.R.BRYOA. Bauer, C.R. Carbondale:
American Bryological and Lichenological
Society. The Bryologist. Winter 1982.
Bibliography. Winter 1982. v. 85 (4). p.
463-468. (NAL Call No.: 450 B84).

# 0107

Recent literature on mosses. 124.

Crosby, M.R.BRYOA. Bauer, C.R. Carbondale:
American Bryological and Lichenological
Society. The Bryologist. Spring 1983.
Bibliography. v. 86 (1). p. 88-93. (NAL Call
No.: 450 B84).

# 0108

Recent literature on mosses. 125.
Crosby, M.R.BRYOA. Bauer, C.R. Carbondale:
American Bryological and Lichenological
Society. The Bryologist. Summer 1983.
Bibliography. v. 86 (2). p. 176-187. (NAL Call
No.: 450 B84).

# 0109

Understory-overstory vegetation relationships: an annotated bibliography / Peter F. Ffolliott and Warren P. Clary.

Ffolliott, Peter F. Clary, Warren P. Ogden, Utah U.S. Dept. of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station 1982. Caption title ~"November 1982. ~Includes index. 39 p.: 1 map; 28 cm. -. (NAL Call No.: aSD11.A48 no.136).

#### 0110

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Woolhouse, H.W. Berkeley: University of California Press. Botanical monographs. 1982. Literature review. v. 18. p. 256-281. ill. Bibliography p. 542-606. (NAL Call No.: 450 B6583).

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Pohl, P. Boca Raton: CRC Press. CRC handbook of biosolar resources. 1982. Literature review. v. 1 (pt.1). p. 383-404. 111 ref. (NAL Call No.: TP360.C7).

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Arnold, W.N. Boca Raton, Fla.: CRC Press, c1981. Yeast cell envelopes: biochemistry, biophysics, and ultrastructure / editor, wilfred Niels Arnold. Literature review. p. 97-114. 80 ref. (NAL Call No.: QK617.5.Y4 VOL. 1).

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Saxton, K.E. Littleton, Colo.: Water Resource Publications, 1982. Modeling components of hydrologic cycle: proceedings, International Symposium on Rainfall Runoff Modeling, May 18-21, 1981, Mississippi State University / ed. V.P. Singh. Literature review. p. 183-204. ill. Includes references. (NAL Call No.: TC401.I53 1981E).

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P. Ting and Martin Gibbs. Literature review. p. 69-91. ill. 56 ref. (NAL Call No.: QK881.S95 1982).

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cytology. 1982. Literature review. v. 76. p.
299-325. 3 p. ref. (NAL Call No.: 442.8 IN82).

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Doran, J.W.AMIED. New York: Plenum Press. Advances in microbial ecology. 1982. Literature review. v. 6. p. 1-32. ill. Includes references. (NAL Call No.: QR100.A4).

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Smith, A.J. Berkeley: University of California Press. Botanical monographs. 1982. Literature review. v. 19. p. 47-85. ill. Bibliography p. 565-670. (NAL Call No.: 450 B6583).

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Molecular biology of budding (Yeasts, bud emergence, ultrastructure, genetic control and evolution, nutrition, growth). Slater, M.L. Boca Raton, Fla.: CRC Press,

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Press, c1981. Yeast cell envelopes:
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Mycotoxins: occurrence in the environment (Fusarium toxins, aflatoxin, ochratoxin). Ciegler, A. Burmeister, H.R.; Vesonder, R.F.; Hesseltine, C.W. Boca Raton, Fla.: CRC Press, c1981. Mycotoxins and N-nitroso compounds: environmental risks / editor, Ronald C. Shank. Literature review. p. 1-50. ill. 385 ref. (NAL Call No.: RA1242.M94M94 V.1).

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Myxamoebae: structure and physiology (Didymium, Physarium, Fungi).
Goodman, E.M. New York: Academic Press, 1982.
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Bacon, J.S.D. Boca Raton, Fla.: CRC Press, c1981. Yeast cell envelopes: biochemistry, biophysics, and ultrastructure / editor, wilfred Niels Arnold. Literature review. p. 65-84. ill. 98 ref. (NAL Call No.: QK617.5.Y4 VOL. 1).

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Marcus, A. Rodaway, S. Berkeley: University of California Press. Botanical monographs. 1982. Literature review. v. 18. p. 337-361. ill. Bibliography p. 542-606. (NAL Call No.: 450 B6583).

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Evans, H.H. New York: Academic Press, 1982. Cell biology of Physarum and Didymium / edited by Henry C. Aldrich, John W. Daniel. Literature review. p. 183-216. ill. 7 p. ref. (NAL Call No.: QK635.P5C44 v. 2).

#### 0428

Orchid mycorrhiza (Fungi, fine structure, orchid seed germination).

Hadley, G. Ithaca: Comstock Publishing Associates. Orchid biology: reviews and perspectives. 1982. Literature review. v. 2. p. 83-118. ill. 4 p. ref. (NAL Call No.: QK495.06407).

# 0429

Palm tissue culture: state of the art and its application to the coconut / by A. Kovoor. Kovoor, A. Rome Food and Agriculture Organization of the United Nations 1981. Paper presented at the fifth session of the FAO Technical Working Party on Coconut Production, Protection and Processing, Manila, December 1979 ~AGPC/MISC/77. 69 p.: ill.; 28 cm. -. Bibliography: p. 62-69. (NAL Call No.: SB13.F6 no.30).

# 0430

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Sugiyama, T. Boca Raton: CRC Press. CRC handbook of biosolar resources. 1982. Review article. v. 1 (pt.1). p. 207-210. 32 ref. (NAL Call No.: TP360.C7).

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Periodic phenomena in Physarum (Fungi). Tyson, J.J. New York: Academic Press, 1982. Cell biology of Physarum and Didymium / edited by Henry C. Aldrich, John W. Daniel. Literature review. p. 61-110. ill. 9 p. ref. (NAL Call No.: QK635.P5C44 v. 1).

#### 0432

Pheromonal regulation of development in Saccharomyces cerevisiae (Yeasts, mating, genetic control of conjugation, cytology and physiology).

Thorner, J. Cold Spring Harbor, N.Y.: Cold Spring Harbor Laboratory, 1981. The Molecular biology of the yeast saccharomyces life cycle and inheritance / edited by Jeffrey N. Strathern, Elizabeth W. Jones, James R. Broach. Literature review. p. 143-180. ill. 8 p. ref. (NAL Call No.: QK623.S23M64).

#### 0433

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Giaquinta, R.T.ARPPA. Palo Alto: (s.n.).
Annual review of plant physiology. 1983.
Literature review. v. 34. p. 347-387. ill.
Includes references. (NAL Call No.: 450 AN78).

# 0434

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Shuvalov, V.A. Krasnovsky, A.A. Chur: Harwood Academic. Soviet scientific reviews. Section D. Biology reviews. 1982. Review article. v. 3. p. 1-24. 114 ref. (NAL Call No.: QH301.568).

# 0435

Photomorphogenesis (Plants).

Johnson, C.B. Berkeley: University of California Press. Botanical monographs. 1982. Literature review. v. 18. p. 365-404. ill. Bibliography p. 542-606. (NAL Call No.: 450 B6583).

# 0436

Photomovement and photosensory transduction in microorganisms (includes blue-green algae, fungi).

Poff, K.L.PHCBA. Hong, C.B. Oxford: Pergamon Press. Photochemistry and photobiology. Dec 1982. Literature review. v. 36 (6). p. 749-752. 62 ref. (NAL Call No.: 382 P56).

# 0437

Photoperiod-controlled induction and enhancement of seasonal adaptation to drought (Crassulacean acid metabolism, plants).

Queiroz, O. Brulfert, J. Rockville, Md.:
American Society of Plant Physiologists, c1982.
Crassulacean acid metabolism: proceedings of the Fifth Annual Symposium in Botany (January 14-16, 1982) / edited by Irwin P. Ting and Martin Gibbs. Literature review. p. 208-230. 38 ref. (NAL Call No.: QK881.S95 1982).

Photosynthesis (Algae, cyanobacteria). Ho, K.K. Krogmann, D.W. Berkeley: University of California Press. Botanical monographs. 1982. Literature review. v. 19. p. 191-214. Bibliography p. 565-670. (NAL Call No.: 450 B6583).

#### 0439

Photosynthetic assimilation of exogenous HC03 (bicarbonate) by aquatic plants (Includes algae).

Lucas, W.J.ARPPA. Palo Alto: (s.n.). Annual review of plant physiology. 1983. Literature review. v. 34. p. 71-104. ill. Includes references. (NAL Call No.: 450 AN78).

#### 0440

Photosynthetic CO2 (carbon dioxide) assimilation by Sedum chloroplasts.
Piazza, G.J. Gibbs, M. Rockville, Md.:
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Crassulacean acid metabolism: proceedings of the Fifth Annual Symposium in Botany (January 14-16, 1982) / edited by Irwin P. Ting and Martin Gibbs. Literature review. p. 128-152. 45 ref. (NAL Call No.: OK881.S95 1982).

#### 0441

The photosynthetic machinery—a new type of photoelectric solar energy converter.

Borisov, A.Yu. Chur: Harwood Academic. Soviet scientific reviews. Section D. Biology reviews. 1982. Review article. v. 3. p. 25-56. 74 ref. (NAL Call No.: QH301.S68).

# 0442

Photosynthetic reaction centers (Bacteria). Cogdell, R.J.ARPPA. Palo Alto: (s.n.). Annual review of plant physiology. 1983. Literature review. v. 34. p. 21-45. Includes references. (NAL Call No.: 450 AN78).

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Phycobilins and phycobiliproteins of algae (Plant pigments).

Gysi, J.R. Chapman, D.J. Boca Raton: CRC Press. CRC handbook of biosolar resources.

1982. Literature review. v. 1 (pt.1). p.

83-102. ill. 124 ref. (NAL Call No.: TP360.C7).

#### 0444

Phycobilisomes: composition and structure (Algae, cyanobacteria).
Cohen-Bazire, G. Bryant, D.A. Berkeley:
University of California Press. Botanical monographs. 1982. Literature review. v. 19. p. 143-190. ill. Bibliography p. 565-670. (NAL Call No.: 450 B6583).

#### 0445

Physical aspects of the yeast cell envelope (Cell disruption, permeability, osmosis, fixation, surface change).

Arnold, W.N. Boca Raton, Fla.: CRC Press, c1981. Yeast cell envelopes: biochemistry, biophysics, and ultrastructure / editor, Wilfred Niels Arnold, Literature review, p. 25-47. 66 ref. (NAL Call No.: QK617.5.Y4 VDL. 1).

#### 0446

Physical, chemical, and nutritional properties of common bean (Phaseolus) proteins.

Sgarbieri, V.C.AFREA. Whitaker, J.R. New York: Academic Press. Advances in food research.

1982. Literature review. v. 28. p. 93-166. ill.

16 p. ref. (NAL Call No.: 389 M87).

#### 0447

Physiological activities of cotton plant metabolites (Green bract, byssinosis).

McCormick, J.P.BCOPB. Shinmyozu, T.; Fajen, O.; Russell, J.A. Memphis: National Cotton Council and The Cotton Foundation. Proceedings - Beltwide Cotton Production Research Conferences. 1983. Paper presented at the 7th Cotton Dust Research Conference, San Antonio, Texas, Jan. 3-4, 1983. 1983. (7th). p. 81-83. ill. Includes references. (NAL Call No.: SB249.N6).

#### 0448

Phytates in legumes and cereals (Nutritional significance of phytic acid).
Reddy, N.R.AFREA. Sathe, S.K.; Salunkhe, D.K.
New York: Academic Press. Advances in food research. 1982. Literature review. v. 28. p.
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#### 0450

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#### 0459

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Strategies of plant reproduction: invited papers presented at a symposium held May 17-20, 1981, at the Beltsville Agricultural Research Center (BARC), Beltsville, Maryland / Werner J. Meudt, editor; organized by the BARC Symposium VI Committee, Albert A. Piringer, chairman; sponsored by the Beltsville Agricultural Research Center, Northeastern Region, Agricultural Research Service, United States Department of Agriculture.

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# 0491

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#### 0492

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# PLANT TAXONOMY AND GEOGRAPHY

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# 0509

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## 0516

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# 0517

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#### 0518

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#### 0522

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## 0523

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#### 0524

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#### 0525

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#### 0526

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#### 0527

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# 0530

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#### 0531

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Conway, Roger K. Washington, D.C. U.S. Dept. of Agriculture, Economic Research Service, National Economics Division (1982). Cover title ~"Staff report. ~"PB82-201674. ~"This paper was reproduced for limited distribution to the research community outside the U.S. Department of Agriculture.". 16 leaves: ill.; 28 cm. Includes bibliographical references. (NAL Call No.: SB945.M54C66).

# 0534

Field trials with baculoviruses: control of forest insect pests.

Cunningham, J.C. New York: M. Dekker, c1982.

Microbial and viral pesticides / edited by Edouard Kurstak. Literature review. p. 335-386.

5 p. ref. (NAL Call No.: SB975.M4).

#### 0535

Host-seeking behavior of the gypsy moth: the influence of polyphagy and highly apparent host plants (Lymantria dispar).

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#### 0536

Insect-fungus association influencing seed deterioration (Transmission of pathogen to crops, includes postharvest infection).
Mills, J.T.PHYTA. St. Paul : American Phytopathological Society. Phytopathology. Feb 1983. Literature review. v. 73 (2). p. 330-335.
111. 49 ref. (NAL Call No.: 464.8 P56).

# (PESTS OF PLANTS - INSECTS)

#### 0537

Insect monitoring technology for evaluation of suppression via pheromone systems (Tobacco budworm, Heliothis virescens).

Lingren, P.D. Raulston, J.R.; Sparks, A.N.; Wolf, W.W. Boca Raton, Fla.: CRC Press, 1982. Insect suppression with controlled release pheromone systems / editors, Agis F. Kydonieus, Morton Beroza. Literature review. p. 171-193. ill. 89 ref. (NAL Call No.: SB933.5.I48 v. 1).

#### 0538

Laminated structure dispensers (for controlled release of pheromone insecticides).

Quisumbing, A.R. Kydonieus, A.F. Boca Raton, Fla.: CRC Press, 1982. Insect suppression with controlled release pheromone systems / editors, Agis F. Kydonieus, Morton Beroza. Literature review. p. 213-235. ill. 98 ref. (NAL Call No.: SB933.5.I48 v. 1).

#### 0539

Mass trapping and trap cropping of the boll weevil, Anthonomus grandis Boheman (Use of male weevils and/or pheromone).

Hardee, D.D. Boca Raton, Fla.: CRC Press, 1982. Insect suppression with controlled release pheromone systems / editors, Agis F. Kydonieus, Morton Beroza. Literature review. p. 65-71. 53 ref. (NAL Call No.: SB933.5.I48 v. 2).

#### 0540

Mass trapping of the gypsy moth (Lymantria dispar, Lepidoptera, Pheromone dynamics). Webb, R.E. Boca Raton, Fla.: CRC Press, 1982. Insect suppression with controlled release pheromone systems / editors, Agis F. Kydonieus, Morton Beroza. Literature review. p. 27-56. ill. 154 ref. (NAL Call No.: SB933.5.I48 v. 2).

# 0541

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Wright, V.F. Vesonder, R.F.; Ciegler, A. New York: M. Dekker, c1982. Microbial and viral pesticides / edited by Edouard Kurstak. Literature review. p. 559-583. 4 p. ref. (NAL Call No.: SB975.M4).

#### 0542

The pheromone of the spruce bark beetle Ips typographus and its potential use in the suppression of beetle populations.

Bakke, A. Riege, L. Boca Raton, Fla.: CRC Press, 1982. Insect suppression with controlled release pheromone systems / editors, Agis F. Kydonieus, Morton Beroza. Literature review. p.

3-15. ill. 62 ref. (NAL Call No.: \$B933.5.I48 v. 2).

#### 0543

Pheromones and evolutionary relationships of Tortricidae (Lepidoptera).
Roelofs, W.L. Brown, R.L. Palo Alto: Annual Reviews. Annual review of ecology and systematics. 1982. Literature review. v. 13. p. 395-422. 143 ref. (NAL Call No.: QH540.A55).

#### 0544

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Lawton, J.H.ARENA. Palo Alto: Annual Reviews Inc. Annual review of entomology. 1983. Literature review. v. 28. p. 23-39. 119 ref. (NAL Call No.: 421 AN72).

#### 0545

Plants, insects, and man--their interrelationships (Plant repellents, defenses from attack).

Jacobson, M. Bronx: New York Botanical Garden. Economic botany. July/Sept 1982. Literature review. v. 36 (3). p. 346-354. ill. 2 p. ref. (NAL Call No.: 450 EC7).

# 0546

Possible uses of recombinant DNA for genetic manipulations of entomopathogenic bacteria (Control of crop and mosquito pests).

Faust, R.M. Reichelderfer, C.F.; Thorne, C.B. New York: Praeger, 1981. Genetic engineering in the plant sciences / edited by Nicholas J. Panopoulos. Literature review. p. 225-254. 7 p. ref. (NAL Call No.: QK981.5.G46).

# 0547

Recent pheromone research in the Netherlands on muskrats and some insects (Pests introduced from America into Europe: the muskrat, Odatra zibethicus, the American cockroach, Periplaneta americana, and the beet army worm, Spodoptera exigua).

Ritter, F.J.ACSMC. Bruggemann, I.E.M.; Gut, J.; Persoons, C.J. Washington, D.C.: The Society. ACS Symposium series - American Chemical Society. 1982. Literature review. 1982. (190). p. 107-130. ill. 46 ref. (NAL Call No.: OD1.A45).

Supplement to the bibliography of Lygus Hahn (Crop pests).
Scott, D.R.BESAA. College Park: The Society.
Bulletin of the Entomological Society of America. Dec 1981. v. 27 (4). p. 275-279. 4 ref. (NAL Call No.: 423.9 EN8).

#### 0549

Suppression of mating in codling moths with synthethic sex pheromone and other compounds (Cydia pomonella, pest of apples, South Africa, Australia, and the western states of North America).

Rothschild, G.H.L. Boca Raton, Fla.: CRC Press, 1982. Insect suppression with controlled release pheromone systems / editors, Agis F. Kydonieus, Morton Beroza. Literature review. p. 117-134. 91 ref. (NAL Call No.: SB933.5.I48 v. 2).

# 0550

A virus vector for genetic engineering in invertebrates (Baculovirus Autographa californica nuclear polyhedrosis virus, DNA genome, virus genetics).
Miller, L.K. New York: Praeger, 1981. Genetic engineering in the plant sciences / edited by Nicholas J. Panopoulos. Literature review. p. 203-224. ill. 4 p. ref. (NAL Call No.: 0K981.5.G46).

#### 0551

Visual detection of plants by herbivorous insects (Visual ecology).

Prokopy, R.J.ARENA. Owens, E.D. Palo Alto: Annual Reviews Inc. Annual review of entomology. 1983. Literature review. v. 28. p. 337-364. 181 ref. (NAL Call No.: 421 AN72).

# PESTS OF PLANTS - NEMATODES

#### 0552

An annotated bibliography of weeds as reservoirs for organisms affecting crops: Ia. Nematodes / J.S. Manuel, L.E. Bendixen, R.M. Kiedel.

Manuel, J. S. Wooster Ohio State University, Ohio Agricultural Research and Development Center 1982. Cover title ~"July 1982.". 34 p.; 28 cm. -. (NAL Call No.: 100 Dh3S (2) no.1146).

#### 0553

An annotated bibliography of weeds as reservoirs for organisms affecting crops in Brazil. Ia. Nematodes: Meloidogyne.
Barbosa Ferraz, L.C.C. Pitelli, R.A.; Bendixen, L.E. Wooster: The Center. Research bulletin - Onio Agricultural Research and Development Center. June 1983. Includes lists of weed species. June 1983. (1153). 16 p. maps. (NAL Call No.: 100 OH3S (2)).

#### 0554

Bibliography on the use of scanning electron microscopy (SEM) in studies of plant parasitic nematodes.

Wergin, W.P.SEMYB. AMF O'Hare: Scanning Electron Microscopy, Inc. Scanning electron microscopy. 1982. Bibliography. v. 1982 (pt. 2). p. 831-836. (NAL Call No.: OH212.S3S3).

# 0555

Interactions between phytophagous nematodes (Mathematical models).

Duncan, L. Ferris, H. Austin: University of Texas Press, 1982. Nematodes in soil ecosystems / edited by Diana W. Freckman; foreword by J.A. Wallwork. Literature review. p. 29-51. ill. 5 p. ref. (NAL Call No.: QL391.N4N384 1982).

#### 0556

Organic amendments in nematode control: an examination of the literature (Phytophagous nematodes).

Muller, R.NMTPA. Gooch, P.S. Auburn:
Organization of Tropical American
Nematologists. Nematropica. Dec 1982.
Literature review. v. 12 (2). p. 319-326.
Includes references. (NAL Call No.:
SB998.N4N4).

# 0557

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references. (NAL Call No.: 464.8 AN72).

#### 0558

Role of nematodes in decomposition (Phytoparasitism, soil ecosystems). Yeates, G.W. Coleman, D.C. Austin: University of Texas Press, 1982. Nematodes in soil ecosystems / edited by Diana W. Freckman; foreword by J.A. Wallwork. Literature review. p. 55-80. 111. 7 p. ref. (NAL Call No.: QL391.N4N384 1982).

# PLANT DISEASES - GENERAL

## 0559

Bibliography (Seed biochemistry and physiology, pathology, identification of cultivars, species).

Kulik, M.M.AOSNA. (s.l.): The Association. The Newsletter of the Association of Official Seed Analysts. May 1983. Bibliography. v. 57 (2). p. 46-54. (NAL Call No.: 61.9 AS7N).

#### 0560

Breeding strategies for stress and disease resistance in developing countries (Plant pathology).

Buddenhagen, I.W.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 385-409. Includes references. (NAL Call No.: 464.8 AN72).

#### 0561

The chemistry and biology of pathotoxins exhibiting host-selectivity (Plant pathogens). Daly, J.M. Knoche, H.W. London: New York: Academic Press. Advances in plant pathology. 1982. Literature review. v. 1. p. 83-138. ill. Includes references. (NAL Call No.: SB731.A35).

# 0562

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Jacobsen, B.J.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 137-152. Includes references. (NAL Call No.: 464.8 AN72)

#### 0563

Genetic tumors: physiological aspects of tumor formation in interspecies hybrids (Nicotiana). Bayer, M.H. New York: Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 33-67. ill. 9 p. ref. (NAL Call No.: SB741.5.M64).

# 0564

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Ouchi, S.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 289-315. Includes references. (NAL Call No.: 464.8 AN72).

#### 0565

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Ouchi, S.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 289-315. Includes references. (NAL Call No.: 464.8 AN72).

#### 0566

Integration and transcription of Ti plasmic fragments (Crown gall tumors, heritable change in transformed plant cells).
Chilton, M.D. New York: Academic Press, c1982.
Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 299-319. ill. 6 p. ref. (NAL Call No.: SB741.5.M64).

#### 0567

Integrative analysis of host-pathogen relations (Plant pathology).

Loomis, R.S.APPYA. Adams, S.S. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 341-362. Includes references. (NAL Call No.: 464.8 AN72).

# 0568

Mechanisms of induced resistance in plants (Fungi, viruses, bacteria).

Sequeira, L. Palo Alto: Annual Reviews, Inc. Annual review of microbiology. 1983. Literature review. v. 37. p. 51-79. Includes references. (NAL Call No.: 448.3 AN72).

#### 0569

Mechanisms of seed infection and pathogenesis. Harman, G.E.PHYTA. St. Paul: American Phytopathological Society. Phytopathology. Feb 1983. Literature review. v. 73 (2). p. 326-329. 73 ref. (NAL Call No.: 464.8 P56).

# 0570

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Gilligan, C. A.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 45-64. Includes references. (NAL Call No.: 464.8 AN72).

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#### 0571

Modeling of soilborne pathogens (Review restricted, to the parasitic phase of the disease cycle of fungi).

Gilligan, C.A.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 45-64. Includes references. (NAL Call No.: 464.8 AN72).

#### 0572

Parent-offspring pathogen transmission: a selective agent promoting sexual reproduction (Plants and animals).

Rice, W.R.AMNTA. Chicago: University of Chicago Press. The American naturalist. Feb 1983. Literature review. v. 121 (2). p. 187-203. 4 p. ref. (NAL Call No.: 470 AM36).

#### 0573

Research on the hypersensitive response (Plant pathology).

Tomiyama, K.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 1-12. Includes references. (NAL Call No.: 464.8 AN72).

#### 0574

Suppressive soils (biological control of plant pathogens).

Hornby, D.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 65-85. Includes references. (NAL Call No.: 464.8 AN72).

## 0575

Teratomas and secondary tumors (Crown gall disease, Agrobacterium tumefaciens, tobacco, tomato).

Turgeon, R. New York: Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 391-414. ill. 4 p. ref. (NAL Call No.: SB741.5.M64).

# 0576

Theory and strategy of chemical control (Plant pathogens).

Skylakakis, G.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 117-135. Includes references. (NAL Call No.: 464.8 AN72).

#### 0577

Use of pathogen-produced toxins in genetic engineering of plants and pathogens (Disease-resistant plants or cells, pest control).

Yoder, O.C. New York: Plenum Press, c1983. Genetic engineering of plants: an agricultural perspective / edited by T. Kosuge, C.P. Meredith; technical editors, C.M. Wilson. Literature review. p. 335-353. Includes references. (NAL Call No.: SB123.G376).

# PLANT DISEASES - FUNGAL

#### 0578

Ecology of mycoparasitism (Interactions in soil, includes fungal phytopathogens).

Lumsden, R.D. New York: Marcel Dekker.

Mycology series. 1981. Literature review. v. 2.
p. 295-318. 6 p. ref. (NAL Call No.: QK600.S4).

#### 0580

Fungal parasitism of woody plant roots from mycorrhizal relationships to plant disease. Wilcox, H.E.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 221-242. Includes references. (NAL Call No.: 464.8 AN72).

#### 0579

Fungal parasitism of woody plant roots from mycorrhizal relationships to plant disease. Wilcox, H.E.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 221-242. Includes references. (NAL Call No.: 464.8 AN72).

#### 0581

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# 0582

Heteroploidy as a mechanism of variability among fungi.

Tolmsoff, W.J.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 317-340. Includes references. (NAL Call No.: 464.8 AN72).

# 0583

Host-specific toxins and chemical structures from Alternaria species (Fungi).
Nishimura, S.APPYA. Kohmoto, K. Palo Alto:
Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 87-116. ill. Includes references. (NAL Call No.: 464.8 AN72).

#### 0584

Hypovirulence (Chestnut blight, Castanea, Endothia pathogens in North America, Europe, Asia).

Elliston, J.E. London: New York: Academic Press. Advances in plant pathology. 1982. Literature review. v. 1. p. 1-33. ill. Includes references. (NAL Call No.: SB731.A35).

#### 0585

Insect-fungus association influencing seed deterioration (Transmission of pathogen to crops, includes postharvest infection).

Mills, J.T.PHYTA. St. Paul: American Phytopathological Society. Phytopathology. Feb 1983. Literature review. v. 73 (2). p. 330-335. ill. 49 ref. (NAL Call No.: 464.8 P56).

#### 0586

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#### 0587

Phytoalexins (Fungal phytopathogens, host plant protection).

Grisebach, H. New York : Marcel Dekker. Mycology series. 1983. Literature review. v. 5. p. 377-428. ill. Includes references. (NAL Call No.: QK600.54).

#### 0588

Zizania latifolia and Ustilago esculenta, a grass-fungus association (Uses, potential of smut fungus infection spread to other plants, nomenclature, distribution).

Terrell, E.E. Batra, L.R. Bronx: New York Botanical Garden. Economic botany. July/Sept 1982. Literature review. v. 36 (3). p. 274-285. ill. 44 ref. (NAL Call No.: 450 EC7).

# PLANT DISEASES - BACTERIAL

#### 0589

Agrobacterium: nature's genetic engineer (Agrobacterium tumefaciens, crown gall agent, introduction of genetic information into plant genomes).

Nutter, R.C. Thomashow, M.F.; Gordon, M.P.; Nester, E.W. New York: Praeger, 1981. Genetic engineering in the plant sciences / edited by Nicholas J. Panopoulos. Literature review. p. 111-128. ill. 29 ref. (NAL Call No.: QK981.5.G46).

## 0590

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Zambryski, P. Goodman, H.M.; Van Montagu, M.; Schell, J. New York: Academic Press, 1983. Mobile genetic elements / edited by J.A. Shapiro. Literature review. p. 505-535. ill. Includes references. (NAL Call No.: QH462.T7M63).

#### 0591

Biology of legume--rhizobium interactions in nodule formation (Infection processes, nitrogen-fixing systems).

Meijer, E.G.M. Broughton, W.J. New York: Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 107-129. ill. 7 p. ref. (NAL Call No.: SB741.5.M64).

#### 0592

Conjugation and transfer of Ti plasmids in Agrobacterium tumefaciens (Crown gall induction, genetic studies, plant cells).

Kerr, A. Ellis, J.G. New York: Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 321-344. ill. 5 p. ref. (NAL Call No.: SB741.5.M64).

#### 0593

Crown gall: a multipotential disease (Tumour-inciting bacteria).

Merlo, D.J. London: New York: Academic Press.

Advances in plant pathology. 1982. Literature review. v. 1. p. 139-178. ill. Includes references. (NAL Call No.: SB731.A35).

# 0594

Ecology and epidemiology of foliar bacterial plant pathogens.

Hirano, S.S.APPYA. Upper, C.D. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 243-219. Includes references. (NAL Call No.: 464.8 AN72).

#### 0595

Ecology of actinomycetes (Soil, compost, aquatic environments, plant pathogens, animal pathogens).
Goodfellow, M. Williams, S.T. Palo Alto:
Annual Reviews, Inc. Annual review of microbiology. 1983. Literature review. v. 37. p. 189-216. Includes references. (NAL Call No.: 448.3 AN72).

#### 0596

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Panopoulos, N.J. New York: Praeger, 1981.

Genetic engineering in the plant sciences / edited by Nicholas J. Panopoulos. Literature review. p. 163-186. ill. 5 p. ref. (NAL Call No.: QK981.5.G46).

#### 0597

Genetic determination of octopine degradation (Crown gall disease, Agrobacterium tumefaciens).

Klapwijk, P.M. Schilperoort, R.A. New York: Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 475-495. ill. 3 p. ref. (NAL Call No.: SB741.5.M64).

# 0598

Mechanisms of spiroplasma pathogenicity.
Daniels, M.J.APPYA. Palo Alto: Annual Reviews,
Inc. Annual review of phytopathology. 1983.
Literature review. v. 21. p. 24-43. Includes
references. (NAL Call No.: 464.8 AN72).

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Mechanisms of spiroplasma pathogenicity (Plant pathogens).
Daniels, M.J.APPYA. Palo Alto: Annual Reviews,

Daniels, M.J.APPYA. Palo Alto: Annual Reviews. Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 29-43. Includes references. (NAL Call No.: 464.8 AN72).

#### 0600

The molecular basis of crown gall induction (Agrobacterium tumefaciens).
Roberts, W.P.IRCYA. New York: Academic Press.
International review of cytology. 1982.
Literature review. v. 80. p. 63-92. ill. 5 p. ref. (NAL Call No.: 442.8 IN82).

Molecular biology of wound healing: the conditioning phenomenon (Plant cells, tumor induction, by Agrobacterium tumefaciens).

Kahl, G. New York: Academic Press, c1982.

Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 211-267. ill. 11 p. ref. (NAL Call No.: SB741.5.M64).

## 0602

Occurrence and biosynthesis of opines (Crown gall disease, genetic manipulation by Agrobacterium tumefaciens).

Tempe, J. Goldmann, A. New York: Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 427-449. 6 p. ref. (NAL Call No.: SB741.5.M64).

#### 0603

The plant pathogenic corynebacteria. Vidaver, A.K. Palo Alto: Annual Reviews, Inc. Annual review of microbiology. 1982. Literature review. v. 36. p. 495-517. Includes references. (NAL Call No.: 448.3 AN72).

## 0604

The role of bacterial ice nucleation in frost injury to plants.

Lindow, S.E.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 363-384. Includes references. (NAL Call No.: 464.8 AN72).

#### 0605

Structure and function of tumor cell chromatin (Agrobacterium tumefaciens, plant cells). Schafer, W. Tripathi, R.K.; Zimmermann, H.; Kahl, G. New York: Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 497-523. ill. 4 p. ref. (NAL Call No.: SB741.5.M64).

#### 9090

T-DNA of the Agrobacterium TI and RI plasmids. Bevan, M.W.ARVGB. Chilton, M.D. Palo Alto: Annual Reviews, Inc. Annual review of genetics. 1982. Literature review. V. 16. p. 357-384. 110 ref. (NAL Call No.: OH431.A1A5).

#### 0607

Teratomas and secondary tumors (Crown gall disease, Agrobacterium tumefaciens, tobacco, tomato).

Turgeon, R. New York: Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 391-414. ill. 4 p. ref. (NAL Call No.: SB741.5.M64).

#### 0608

Ti Plasmids of Agrobacterium tumefaciens: the nature of the TIP (in crown gall formation, plant cells).

Holsters, M. Hernalsteens, J.P.; Van Montagu, M.; Schell, J. New York: Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 269-298. ill. 7 p. ref. (NAL Call No.: SB741.5.M64).

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#### 0609

Enzymes involved in the replication of plant viral RNAs.

Hall, T.C. Miller, W.A.; Bujarski, J.J. London: New York: Academic Press. Advances in plant pathology. 1982. Literature review. v. 1. p. 179-211. ill. Includes references. (NAL Call No.: SB731.A35).

#### 0610

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#### 0611

Plantago as a host of economically important viruses (Plantago lanceolata, Plantago major, plant viruses).

Hommond, J.AVREA. New York: Academic Press. Advances in virus research. 1982. Literature review. v. 27. p. 103-140. Includes references. (NAL Call No.: 448.8 AD9).

# 0612

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## 0613

Viroids and their interactions with host cells. Diener, T.O. Palo Alto: Annual Reviews, Inc. Annual review of microbiology. 1982. Literature review. v. 36. p. 239-258. ill. Includes references. (NAL Call No.: 448.3 AN72).

#### 0614

Wound tumor disease (Viruses, susceptible plants, deletion mutations).

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Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 69-105. ill. 5 p. ref. (NAL Call No.: SB741.5.M64).

# PLANT DISEASES - PHYSIOLOGICAL

## 0615

Breeding for tolerance of nutrient imbalances and constraints to growth in acid, alkaline and saline soils (Field crops, aluminum and manganese toxicity, deficiencies, salinity). Duvick, D.N.JPNUD. Kleese, R.A.; Frey, N.M. New York: Marcel Dekker. Journal of plant nutrition. 1981. Literature review. v. 4 (2). p. 111-129. 54 ref. (NAL Call No.: QK867.J67).

#### 0621

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Healey, F.P. Berkeley: University of
California Press. Botanical monographs. 1982.
Literature review. v. 19. p. 105-124.
Bibliography p. 565-670. (NAL Call No.: 450 B6583).

#### 0616

Causes of square and boll shedding in cotton (Abscission, environmental conditions, hormonal balance, enzyme activities).
Guinn, G. Washington: The Department.
Technical bulletin - United States Dept. of Agriculture. Sept 1982. Literature review. Sept 1982. (1672). 22 p. ill. 8 p. ref. (NAL Call No.: 1 AG84TE).

#### 0617

Genetic differences in plant response to soil nutrient stress.

Lafever, H.N.JPNUD. New York: Marcel Dekker.

Journal of plant nutrition. 1981. Literature review. v. 4 (2). p. 89-109. 102 ref. (NAL Call No.: QK867.J67).

#### 0618

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#### 0671

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#### 0682

The triazine herbicides (Properties, analytical procedures, sample collection, preservation, and preparation).

Smith, A.E. Muir, D.C.G.; Grover, R. Boca Raton, Fla.: CRC Press, c1982. Analysis of pesticides in water / senior editor, A.S.Y. Chau, co-editor B.K. Afghan. Includes tabules of common and chemical names, formulae, molecular weights and structures ~Literature review. p. 213-239. ill. Includes references. (NAL Call No.: TP248.P47A49 V.3).

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#### 0691

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#### 0692

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Doran, J.W.AMIED. New York: Plenum Press. Advances in microbial ecology. 1982. Literature review. v. 6. p. 1-32. ill. Includes references. (NAL Call No.: QR100.A4).

#### 0693

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Gilligan, C. A.APPYA. Palo Alto: Annual Reviews, Inc. Annual review of phytopathology. 1983. Literature review. v. 21. p. 45-64. Includes references. (NAL Call No.: 464.8 AN72).

# 0694

Nitrogen fixation (Algae, cyanobacteria). Bothe, H. Berkeley: University of California Press. Botanical monographs. 1982. Literature review. v. 19. p. 87-104. Bibliography p. 565-670. (NAL Call No.: 450 B6583).

#### 0895

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Kalakutskii, L.V.BIBUD. Pariiskaya, A.N. New York: Consultants Bureau. Biology bulletin of the Academy of Sciences of the USSR. Mar/Apr 1982 (pub. 1983). Literature review. Translated from: Akademiia nauk SSSR, Izvestiia, Seriia biologicheskaia, p. 255-270. (511SA2B). v. 9 (2). p. 172-185. ill. 3 p. ref. (NAL Call No.: 0H301.A43).

#### 0696

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Hadley, G. Ithaca: Comstock Publishing Associates. Orchid biology: reviews and perspectives. 1982. Literature review. v. 2. p. 83-118. ill. 4 p. ref. (NAL Call No.: QK495.06407).

#### 0697

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#### 0698

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## 0699

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Nuti, M.P. Lepidi, A.A.; Prakash, R.J.;
Hooykaas, P.J.J.; Schilperoort, R.A. New York:
Academic Press, c1982. Molecular biology of plant tumors / edited by Gunter Kahl and Josef S. Schell. Literature review. p. 561-588. ill. 6 p. ref. (NAL Call No.: SB741.5.M64).

#### 0700

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Gochenaur, S.E. New York: Marcel Dekker. Mycology series. 1981. Literature review. v. 2. p. 459-479. 5 p. ref. (NAL Call No.: OK600.S4).

# 0701

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#### 0702

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Fischer, William C. McClelland, B. Riley; (Bernard Riley), 1935. Ogden, Utah U.S. Dept. of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station 1983. Caption title -"March 1983.". 79 p.: 1 map; 28 cm. -. (NAL Call No.: aSD11.A48 no.140).

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#### 0884

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#### 0903

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Allen, K.M.VTYMA. Edwardsville: Veterinary Medicine Publishing Co. VM/SAC, veterinary medicine & small animal clinician. June 1983. v. 78 (6). p. 893-899. maps. (NAL Call No.: 41.8 M69).

#### 0904

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Tortora, D.F.CPCEA. Santa Barbara: Veterinary Practice Publishing Co. Canine practice.
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Prokopy, R.J.ARENA. Owens, E.D. Palo Alto: Annual Reviews Inc. Annual review of entomology. 1983. Literature review. v. 28. p. 337-364. i8i ref. (NAL Call No.: 42i AN72).

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#### 0906

A review of anatomy and physiology of the stallion (Horse).

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#### 0907

State of the art of identification for cyprinid fish larvae from eastern North America (Morphological characteristics).
Fuiman, L.A.TAFSA. Conner, J.V.; Lathrop, B.F.; Buynak, G.L.; Snyder, D.E. Lawrence: The Society. Transactions of the American Fisheries Society. Mar 1983. Paper presented at the Sixth Larval Fish Conference, held 1-3 Mar 1982 in Solomons, Maryland. v. 112 (2B). p. 319-332. ill. Includes references. (NAL Call No.: 414.9 AM3).

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Ashhurst, D.E. New York: Plenum Press, c1982.

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The utility of developmental osteology in taxonomic and systematic studies of teleost larvae: a review (Fishes, includes morphology). Dunn, J.R. Rockville: The Service. NOAA technical report NMFS Circular - United States, National Marine Fisheries Service. June 1983. Literature review. June 1983. (450). 19 p. ill. Includes references. (NAL Call No.: QL121.A1U5).

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#### 0910

Cottonseed meal in rabbit rations—a review (Feeding, gossypol, toxicity).
McNitt, J.I. Corvallis: OSU Rabbit Research Center. The Journal of applied rabbit research.
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Effects of phosphorus-containing compounds on iron and zinc utilization; a review of the literature (Diet, humans, turkey poults). Greger, J.L.ACSMC. Washington, D.C.: The Society. ACS Symposium series - American Chemical Society. 1982. 1982. (203). p. 107-120. 68 ref. (NAL Call No.: QD1.A45).

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Damron, B.L. Groton: The Department.

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renewable resource: theory and practice / Y.
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Millikin, M.R.FSYBA. Seattle: Scientific Publications Office, National Marine Fisheries Service, NOAA. Fishery bulletin - United States, National Marine Fisheries Service. Oct 1982. Literature review. v. 80 (4). p. 655-686. Includes references. (NAL Call No.: 157.5 B87).

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Goater, L.E. Snyder, J.L.; Huff, A.N.; Meacham, T.N. Wildomar: W. E. Jones. Journal of equine veterinary science. Mar/Apr 1982. Literature review. v. 2 (2). p. 58-61. Includes references. (NAL Call No.: SF951.J65).

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Pomeranz, Y. Washington: The Service.
Bibliographies and literature of agriculture: United States, Dept. of Agriculture, Agricultural Research Service. Apr 1982.

Includes subject index ~Bibliography. Apr 1982. (18). 17 p. (NAL Call No.: aZ5076.A1U56).

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Alkaline phosphatase, solution structure, and mechanism.

Coleman, J.E.AERAA. Gettins, P. New York: Wiley-Interscience. Advances in enzymology & related areas of molecular biology. 1983. Literature review. v. 55. p. 381-452. ill. Includes references. (NAL Call No.: 390 N75A).

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Hansen, K. Wieczorek, H. New York: Academic Press, 1981. Biochemistry of taste and olfaction / edited by Robert H. Cagan, Morley R. Kare. Literature review. p. 139-162. ill. 3 p. ref. (NAL Call No.: QP456.B56).

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#### 0923

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Gower, D.B. Hancock, M.R.; Bannister, L.H. New York: Academic Press, 1981. Biochemistry of taste and olfaction / edited by Robert H. Cagan, Morley R. Kare. Literature review. p. 7-31. ill. 3 p. ref. (NAL Call No.: QP456.B56).

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Nash, D. Henderson, J.F. New York: Academic Press. Advances in comparative physiology and biochemistry. 1982. Literature review. v. 8. p. 1-51. 9 p. ref. (NAL Call No.: 444 L952).

#### 0925

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Byers, G.W.ARENA. Thornhill, R. Palo Alto:
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#### 0926

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Wille, A.ARENA. Palo Alto: Annual Reviews Inc.
Annual review of entomology. 1983. Literature review. v. 28. p. 41-64. ill. 50 ref. (NAL Call No.: 421 AN72).

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Biology of Tipulidae (Includes population dynamics).
Pritchard, G.ARENA. Palo Alto: Annual Reviews Inc. Annual review of entomology. 1983.
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Kindl, H.IRCYA. New York: Academic Press.

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#### 0929

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references. (NAL Call No.: SF601.A46).

#### 0930

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Barnawell, E.B. New York: Academic Press.

Advances in comparative physiology and biochemistry. 1982. Literature review. v. 8. p. 53-71. ill. 7 p. ref. (NAL Call No.: 444 L952).

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#### 0932

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Sonnet, P.E.ACSMC. Heath, R.R. Washington, D.C.: The Society. ACS Symposium series - American Chemical Society. 1982. Literature review. 1982. (190). p. 61-85. ill. 60 ref. (NAL Call No.: QD1.A45).

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Dupont, J. Boca Raton, Fla.: CRC Press, c1982. Cholesterol systems in insects and animals / editor Jacqueline Dupont. Literature review. p. 117-144. ill. 74 ref. (NAL Call No.: QL495.C48).

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#### 0936

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Butler, P.J. Jones, D.R. New York: Academic Press. Advances in comparative physiology and biochemistry. 1982. Literature review. v. 8. p. 179-364. ill. 39 p. ref. (NAL Call No.: 444 L952).

#### 0937

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Kuroda, Y. New York: Academic Press, 1982. Invertebrate cell culture applications / edited by Karl Maramorosch and Jun Mitsuhashi. Literature review. p. 53-104. ill. 7 p. ref. (NAL Call No.: QH585.I548).

#### 0938

The effects of ecdysteroid hormones on Drosophila melanogaster cell lines.
Cherbas, L. Cherbas, P. New York: Academic Press. Advances in cell culture. 1981.
Literature review. 1981. v. 1. p. 91-124. ill.
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#### 0939

Energy transfer in insects (Ecological energetics, physiological aspects).
Wiegert, R.G.ARENA. Petersen, C.E. Palo Alto:
Annual Reviews Inc. Annual review of entomology. 1983. Literature review. v. 28. p. 455-486. 138 ref. (NAL Call No.: 421 AN72).

#### 0940

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Murphy, D.J.ARPHA. Palo Alto: Annual Reviews
Inc. Annual review of physiology. 1983.
Literature review. v. 45. p. 289-299. Includes references. (NAL Call No.: 444.8 AN7).

#### 0941

Insect antifreezes and ice-nucleating agents (Cold tolerance).

Duman, J.G.CRYBA. New York: Academic Press.

Cryobiology. Dec 1982. Literature review. v. 19 (6). p. 613-627. 63 ref. (NAL Call No.: QH324.C7).

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Insect thermoperiodism.

Beck, S.D.ARENA. Palo Alto: Annual Reviews Inc. Annual review of entomology. 1983. Literature review. V. 28. p. 91-108. 77 ref. (NAL Call No.: 421 AN72).

#### 0943

Intestinal microbiota of termites and other xylophagous insects (Protozoa, bacteria).

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#### 0944

Invertebrate neuropeptides: native and naturalized.

Greenberg, M.J.ARPHA. Price, D.A. Palo Alto: Annual Reviews Inc. Annual review of physiology. 1983. Literature review. v. 45. p. 271-288. Includes references. (NAL Call No.: 444.8 AN7).

#### 0945

Mechanism and control of salt absorption in locust rectum (Chloride transport, insect excretion).

Hanrahan, J.AJPHA. Phillips, J.E. Bethesda: American Physiological Society. American journal of physiology. Feb 1983. Literature review. v. 244 (2). p. R131-R142. ill. 88 ref. (NAL Call No.: 447.8 AM3).

#### 0946

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Tsuji, F.I. New York: Academic Press, 1982. From cyclotrons to cytochromes: essays in molecular biology and chemistry / edited by N.O. Kaplan, A. Robinson. Literature review. p. 537-559. ill. Includes references. (NAL Call No.: QH506.F75).

#### 0947

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Savage, D.C.IRCYA. New York: Academic Press. International review of cytology. 1983. Literature review. v. 82. p. 305-334. ill. Includes references. (NAL Call No.: 442.8 IN82).

#### 0948

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Hall, D.W.DCIMD. New York: Pergamon Press. Developmental and comparative immunology. Winter 1983. Review article. v. 7 (1). p. 1-2. ill. Includes references. (NAL Call No.: OR180.D4).

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Margolis, F.L. New York: Academic Press, 1981. Biochemistry of taste and olfaction / edited by Robert H. Cagan, Morley R. Kare. Literature review. p. 369-394. ill. 5 p. ref. (NAL Call No.: OP456.B56).

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McIlwraith, C.W. Manhattan: American College of Veterinary Toxicologists. Proceedings of the ... annual convention - American Association of Equine Practitioners. 1981 (pub. 1982). Literature review. 1981 (pub. 1982). (27th). p. 115-123. 39 ref. (NAL Call No.: SF601.A46).

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Page, R.B.AUPHA. Bethesda: American Physiological Society. American journal of physiology. Dec 1982. Literature review. v. 243 (6). p. E427-E442. ill. 224 ref. (NAL Call No.: 447.8 AM3).

#### 0952

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Counsell, R.E. Korn, N. Boca Raton, Fla.: CRC Press, c1982. Receptor-binding radiotracers / editor, William C. Eckelman. Literature review. p. 147-162. ill. 49 ref. (NAL Call No.: QP519.9.R28R4 V.1).

#### 0953

Radiolabeled enzyme inhibitors (Adrenomedullary enzymes, adrenocortical enzymes, suicide inhibitors, fatty acid derivatives).
Wieland, D.M. Boca Raton, Fla.: CRC Press, c1982. Receptor-binding radiotracers / editor, William C. Eckelman. Literature review. p. 127-146. 47 ref. (NAL Call No.: QP519.9.R28R4 V.1).

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Replication of arboviruses in arthropod in vitro systems: an overview (Tissue culture). Pudney, M. Leake, C.J.; Buckley, S.M. New York: Academic Press, 1982. Invertebrate cell culture applications / edited by Karl Maramorosch and Jun Mitsunashi. Literature review. p. 159-194. 6 p. ref. (NAL Call No.: QH585.I548).

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A review of anatomy and physiology of the stallion (Horse).

Amann, R.P. Wildomar: W. E. Jones. Journal of equine veterinary science. May/June 1981. Literature review. v. 1 (3). p. 83-105. ill. Includes references. (NAL Call No.: SF951.J65).

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#### 1276

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Echelberger, Herbert E.,: 1938-; Gilroy, Donna.; Moeller, George.& 1961-1982 recreation research publications. Washington, D.C. U.S. Dept. of Agriculture, Forest Service 1983. Cover title: 1961-1982 recreation research publications ~"January 1983. ~Includes indexes. ii, 94 p.; 28 cm. (NAL Call No.: a27514.F75R4).

#### 1277

A selected bibliography for surface coal mining environmental monitoring and reclamation / by: Lyle V.A. Sendlein, Hasan Yazicigil.
Sendlein, Lyle V. A. Yazicigil, Hasan.
Springfield, Va. Available from National Technical Information Service 1982.
"DOE/ET/14146-1. ~At head of title: Coal Extraction and Utilization Research Center Southern Illinois University at Carbondale ~"January 1982. ~"Prepared for U.S. Dept. of Energy, Assistant Secretary of Energy
Technology, Office of Coal Mining under contract no. DE-AC-22-80ET14146.". vii, 92 p.; 28 cm. (NAL Call No.: Z6738.C6S46).

#### 1278

Selected bibliography (on wildlife values of gravel pits).
St. Paul: The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (17), p. 237-249. (NAL Call No.: \$1.M52).

#### 1279

Socioeconomic values of wetlands: concepts, research methods, and annotated bibliography / Jay A. Leitch; in collaboration with Laurence Falk ... (et al.).
Leitch, Jay A. Falk, Laurence L. Fargo, N.D. Soils Dept., North Dakota State University 1981. Cover title ~Includes index. 42 p.: ill.; 28 cm. -. "Literature cited:" p. 12-15. "Annotated bibliography:" p. 15-40. (NAL Call No.: 100 N813R no.81).

#### 1280

Urban parks and recreation in the United States, 1970-79: a bibliography / Robert C. Wendling.
Wendling, Robert C. Monticello, Ill. Vance Bibliographies 1981. Cover title. 30 p.; 28 cm. -. (NAL Call No.: Z6905.W4).

#### 1281

Wetland hydrology: state-of-the-art and annotated bibliography (Prairies, United States).
Leitch, J.A.NDKRA. Nelson, W.C.; Dgaard, L.A.; Scott, D.F. Fargo: The Station. North Dakota research report - North Dakota Agricultural Experiment Station. July 1981. July 1981. (82). 16 p. Includes references. (NAL Call No.: 100 N813R).

#### 1282

Wetland vegetation of the Prairie Pothole Region: research methods and annotated bibliography / by Louis A. Ogaard; in collaboration with Jay A. Leitch and Gary K. Clambey.

Ogaard, Louis A. Leitch, Jay A. Fargo, N.D. Agricultural Experiment Station, North Dakota State University 1981. Cover title ~Includes index. iv, 50 p.; 28 cm. -. Bibliography: p. 48-50. (NAL Call No.: 100 N813R no.85).

### FOOD SCIENCE AND FOOD PRODUCTS

#### 1283

Ginger -- chemistry, technology, and quality evaluation: Part 2 Govindarajan, V.S.CRFND. Boca Raton : CRC Press. Abstract: A detailed literature review is presented which extends the description of the chemistry, technology, and quality evaluation of ginger initiated in an earlier review. Major attention is given to analytical characterization of chemical compounds of ginger aroma and related chemicals. Objective and sensory evaluation of ginger quality, ginger's functional properties in food, the relationship between chemical structure and pungency, and ginger's biosynthetic aspects are examined. The results of this assessment indicate that, while differences are observed in chemical composition of ginger from various sources, it is not clear if differences exist in aroma quality and in the intensity of aroma and pungency. Further, despite the extensive analytical work reported, the parameters and methods of analysis relevant to aroma and pungency need to be specified and standardized. More attention also is needed in the areas of production, storage, and processing of ginger products relative to quality control. (wz). CRC critical reviews in food science and nutrition. 1982. v. 17 (3). p. 189-258. ill., charts. 212 ref. (NAL Call No.: TP368.C7).

#### 1284

Information sources on the flour milling and the bakery products industries / United Nations Industrial Development Organization.

New York United Nations 1981. "ID 268. ~Text in English, French, Russian and Spanish. xii, 100 p.; 21 cm. -. (NAL Call No.: Z7914.M6I5).

# FOOD SCIENCE, HORTICULTURAL CROP

#### 1285

Cassava as a food.

Okezie, B. Onuma.CRFND. Kosikowski, Frank V. Boca Raton : CRC Press. Abstract: A literature review is presented on cassava, a major carbohydrate energy source for 300-500 million people, grown exclusively in tropical rregions of the world. It is mainly cultivated in less developed countries by small farms with little technology. Attention is given to: the origin, cultural, and quality characteristics of cassava; biochemical properties and nutritional quality of cassava and its products; and the current status, potential, and associated constraints of its production and use. The nutritional aspects of cassava roots and leaves are discussed, as are the major (linamarin) and minor (lotaustralin) toxic cyanogenic glucosides of cassava. The form in which cassava is eaten varies by country and region. Evidence now exists to show that cassava products can, to a large extent, be successfully used as substitutes for certain cereals in nutritionally-balanced rations for various livestock species in both tropical and temperate countries. Constraints limiting cassava production and use include: post harvest and storage problems, labor requirements, nutrient deficiency, and cassava toxicity. (wz). CRC critical reviews in food science and nutrition. 1982. v. 17 (3). p. 259-275. charts. 79 ref. (NAL Call No.: TP368.C7).

#### 1286

Cassava leaves as human food (Manihot esculenta).

Lancaster, P.A.ECBOA. Brooks, J.E. New York : New York Botanical Garden. Economic botany. July/Sept 1983. Literature review. v. 37 (3). p. 331-348. ill. Includes references. (NAL Call No.: 450 EC7).

### FOOD PROCESSING

1287

Certain utilization aspects of food irradiation (Quality and sanitation, quarantine treatment, chemical residues).

Loaharanu, P. Urbain, W.M. Boca Raton, Fla.: CRC Press, c1982. Preservation of food by ionizing radiation / editors, E.S. Josephson, M.S. Peterson. Literature review. p. 65-78. Includes references. (NAL Call No.: TP371.8.P74 V.1).

1288

Chemical, biochemical, functional, and nutritional characteristics of collagen in food systems.

Asghar, A.AFREA. Henrickson, R.L. New York: Academic Press. Advances in food research. 1982. Literature review. v. 28. p. 231-372. ill. 40 p. ref. (NAL Call No.: 389 M87).

1289

Dosimetry (for controlling irradiation doses in food processing).

McLaughlin, W.L. Jarrett, R.D. Sr.; Olejnik, T.A. Boca Raton, Fla.: CRC Press, c1982. Preservation of food by ionizing radiation / editors, E.S. Josephson, M.S. Peterson. Literature review. p. 189-245. Includes references. (NAL Call No.: TP371.8.P74 V.1).

1290

Enzymes of industrial interest--traditional products (Food processing).

Aunstrup, K.ARFED. New York: Academic Press. Annual reports on fermentation processes. 1983. Literature review. v. 6. p. 175-201. Includes references. (NAL Call No.: QR151.A54).

1291

Food preservation with nontraditional antimicrobial agents.

Shibasaki, I.JFSAD. Westport: Food & Nutrition Press. Journal of food safety. 1982. Literature review. v. 4 (1). p. 35-51. 7 p. ref. (NAL Call No.: TP373.5.J62).

1292

Genetic improvement of industrial yeasts (Brewing, baking, winery, distiller's yeasts, food yeasts).

Spencer, J.F.T. Spencer, D.M. Palo Alto: Annual Reviews, Inc. Annual review of microbiology. 1983. Literature review. v. 37. p. 121-142. Includes references. (NAL Call No.: 448.3 AN72). 1293

In vitro measurement of effects of processing on protein nutritional quality (Foods). Swaisgood, H.E.JFPRD. Catignani, G.L. Ames: International Association of Milk, Food, and Evironmental Sanitarians. Journal of food protection. Nov 1982. Literature review. v. 45 (13). p. 1248-1256. ill. 49 ref. (NAL Call No.: 44.8 J824).

1294

A newe preservative system for food (A combination of food grade chemicals, antimicrobial compounds, chelating agents). Kabara, J.J.JFSAD. Westport: Food & Nutrition Press. Journal of food safety. 1982. Literature review. v. 4 (1). p. 13-25. 3 p. ref. (NAL Call No.: TP373.5.J62).

1295

Practical applications of food dehydration: A review.

Cunningham, F.E.JFPRD. Ames: International Association of Milk, Food, and Environmental Sanitarians. Extract: Removal of water from foods is one of the oldest methods of preserving foods. Today, nearly all foods can be preserved by use of a variety of controlled dehydration processes. Many chemical and physical changes can take place during food dehydration, and such changes determine the ultimate quality of the dried and rehydrated product. Some of the more common drying methods or selected drying processes for various foods are reviewed. A summary of the nutritive value of dehydrated foods is presented. (author). Journal of food protection. April 1982. Literature review. v. 45 (5). p. 479-483. ill., charts. 45 ref. (NAL Call No.: 44.8 J824).

1296

Protein food supplements : recent advances / edited by M.A. Maltz.

Maltz, M. A. Park Ridge, N.J. Noyes Data Corp. 1981. Abstract: A commercially oriented review of recent developments in the field of protein food supplements is presented. Information is made available from the U.S. patent literature; most of the patents issued on protein food supplements are included in the review. A number of technical possibilities available are described; these may be developed into profitable areas of research and development. Patents are categorized into the following areas: biochemical methods of protein production; soybean processing; proteins isolated from other seeds; protein from grains including wheat, corn, and oats; proteins derived from alfalfa and other leafy plants; protein products of dairy origin; protein products of animal origin; and applications. (rkm). Includes indexes. xii, 404 p.; 24 cm. -. (NAL Call No.: TP453.P7P75 F&N B-3203).

#### 1297

Radiation chemistry of water soluble food components (Preservation techniques).
Simic, M.G. Boca Ration, Fla.: CRC Press, c1983. Preservation of food by ionizing radiation / editors, E.S. Josephson, M.S. Peterson. Literature review. p. 1-73. ill. Includes references. (NAL Call No.: TP371.8.P74 V.2).

#### 1298

Radiation effects on arthropods (Relevant to food preservation by irradiation).
Tilton, E.W. Brower, J.H. Boca Ration, Fla.:
CRC Press, c1983. Preservation of food by ionizing radiation / editors, E.S. Josephson, M.S. Peterson. Literature review. p. 269-316. Includes references. (NAL Call No.: TP371.8.P74 V.2).

#### 1299

Reaction mechanisms, irradiation parameters, and product formation (Irradiation, preservation of foods).

Taub, I.A. Boca Ration, Fla.: CRC Press, c1983. Preservation of food by ionizing radiation / editors, E.S. Josephson, M.S. Peterson. Literature review. p. 125-166. ill. Includes references. (NAL Call No.: TP371.8.P74 V.2).

#### 1300

Ventures in yeast utilization (Food processing).
Peppler, H.J.ARFED. New York: Academic Press.
Annual reports on fermentation processes. 1983.
Literature review. v. 6. p. 237-251. ill.
Includes references. (NAL Call No.: QR151.A54).

# FOOD PROCESSING, DAIRY

#### 1301

Update on postmilking teat antisepsis (Cows, mastitis, Streptococcus agalactiae, disinfectants).

Pankey, J.W. Cuming, A.L.; Daggett, R.D.; Eberhart, R.J.; Farnsworth, R.J. Washington, D.C.: The Council. Annual meeting - National Mastitis Council, Inc. 1983. Literature review. 1983. (22nd). p. 52-103. Includes references. (NAL Call No.: SF967.M3N32).

# FOOD PROCESSING, LIVESTOCK

#### 1302

Alternatives to the current use of nitrite in foods : part 2 of a 2-part study / by the Committee on Nitrite and Alternative Curing Agents in Food, Assembly of Life Sciences. Assembly of Life Sciences (U.S.) ~ Committee on Nitrite and Alternative Curing Agents in Food. Washington, D.C. National Academy Press 1982. Abstract: A 2-part study on the health effects of nutrite and related compounds (nitrate, N-nitroso compounds), was performed by the US National Research Council Committee on Nitrite and Alternative Curing Agents in Food. The purpose of the study was to review the research status and future prospects for developing feasible alternatives to nutrite use as a food preservative. The most promising alternative to nutrite use in bacon is the use of alpha-tocopherol (500 mg/kg) in combination with ascorbate (550 mg/kg) and sodium nitrite (120 mg/kg), which significantly reduces nitrosamines formation. Mutagenicity tests (and possible animal toxicity tests) should be conducted on this combination. The effect of the combination of ascorbate and tocopherol on nitrite's anti-botulinal activity in bacon and other cured-meat products also should be tested. Irradiation with/without nitrite appears to be effective against C. botulinum in several cured-meat products, but further work is needed. Other potential nitrite alternatives requiring further evaluation include lactic acid bacteria, sodium hypophosphite, fumarate esters, and potassium sorbate plus low (40-80 mg/kg) nutrite. (wz). ca. 275 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: TX553.A3A7 F&N B-3422).

#### 1303

The economics and palatability attributes of hot-boned beef: a review (Advantages and disadvantages).

Seideman, S.C.JFQUD. Cross, H.R. Westport: Food & Nutrition Press. Journal of food quality. 1983. Literature review. v. 5 (3). p. 183-201. Includes references. (NAL Call No.: TP373.5.J6).

#### 1304

Effects of freezing rate on meat quality.
Berry, B.W. San Antonio: Research and
Development Associated for Military Food and
Packaging Systems, Inc. Activities report of
the R & D Associates. 1983. Literature review.
v. 35 (1). p. 113-142. 8 p. ref. (NAL Call No.:
389.9 AS74A).

#### 1305

Functionality of muscle constituents in the processing of comminuted meat products.

Acton, J.C.CRFND. Ziegler, G.R.; Burge, D.L. Jr. Boca Raton: CRC Press. CRC critical reviews in food science and nutrition. 1983. Literature review. v. 18 (2). p. 99-121. ill.

73 ref. (NAL Call No.: TP368.C7).

#### 1306

Meat flavor: pork and pork products (1972 - Jan 83): (citations from the Food Science and Technology Abstracts data base).

Springfield, Va. NTIS 1983. "PB83-859207. ~"Report period covered: 1972-Jan 83. ~Includes index. 194 leaves in various foliations; 28 cm. (NAL Call No.: Z5776.C4M43).

#### 1307

Utilization of electrical stimulation to improve meat quality: a review.
Seideman, S.C.JFQUD. Cross, H.R. Westport:
Food & Nutrition Press. Journal of food quality. 1983. Literature review. v. 5 (4). p. 247-269. Includes references. (NAL Call No.: TP373.5.J6).

# FOOD PROCESSING, POULTRY

#### 1308

Effects of freezing rate on meat quality.
Berry, B.W. San Antonio: Research and
Development Associated for Military Food and
Packaging Systems, Inc. Activities report of
the R & D Associates. 1983. Literature review.
v. 35 (1). p. 113-142. 8 p. ref. (NAL Call No.:
389.9 AS74A).

#### 1309

Poultry food processing (1972 - Jun 83): (citations from the Food Science and Technology abstracts data base) / New England Research Application Center.

Springfield, Va. National Technical Information Service 1983. Report period covered: 1972 - Jun 1983 ~PB83-867192 ~NW8019 ~Includes index. 1 v. (various pagings); 29 cm. (NAL Call No.: Z5074.P8P62).

# FOOD PROCESSING, FIELD CROP

#### 1310

Application and control of thermoplastic extrusion of cereals for food and industrial uses (Texturized vegetable proteins, starches). El-Dash, A.A. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 165-216. ill. 4 p. ref. (NAL Call No.: SB188.2.C368).

#### 1316

pasteurizer heating and cooling processes (Brewing industry).
Brandon, H.TQMBA. Pelton, P.; Staack, G.
Madison: The Association. Technical quarterly
- Master Brewers Association of the Americas.
Jan/Mar 1982. v. 19 (1). p. 34-40. ill.
Includes references. (NAL Call No.: 390.9
M39T).

State-of-the-art methodology for evaluation of

#### 1311

Barley for food, feed and industry.

Munck, L. St. Paul, Minn.: American
Association of Cereal Chemists, c1981. Cereals,
a renewable resource: theory and practice / Y.
Pomeranz, Lars Munck, editors. Literature
review. p. 427-459. ill. 5 p. ref. (NAL Call
No.: SB188.2.C368).

#### 1312

Bioconversion processes (Cereal crops, foods, beverages, silage, and useful chemicals, biomass production).

Linko, P. Linko, Y.Y. St. Paul, Minn.:
American Association of Cereal Chemists, c1981.
Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors.
Literature review. p. 339-357. 9 p. ref. (NAL Call No.: SB188.2.C368).

#### 1313

Cereals--a renewable resource (for foods, feeds, chemical feedstocks, and fuels).

Pomeranz, Y. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 709-728. 4 p. ref. (NAL Call No.: SB188.2.C368).

#### 1314

Clarification and filtration (Sugarcane juice). Clarke, S.J.SUAZA. New York: Ruspam Communications Inc. Sugar y azucar. Feb 1982. Literature review. Spanish text p. 114-123. v. 77 (2). p. 132-143. ill. 63 ref. (NAL Call No.: 65.8 F11).

#### 1315

Industrial chemicals from cereals (Food, feed, energy).

Daniel, J.R. Whistler, R.L. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 307-323. ill. 4 p. ref. (NAL Call No.: SB188.2.C368).

# FOOD PROCESSING, HORTICULTURAL CROP

#### 1317

Food industry: sunflower oil (Jul 76 - Sep 82): (citations from the Food Science and Technology Abstracts data base).

Springfield, Va. NTIS 1982. "PB82-874835. ~ "Report period covered: Jul 76-Sep 82. ~ Includes index. 217 leaves in various foliations; 28 cm. (NAL Call No.: Z5074.S9F6).

#### 1318

Food industry: vegetable oil (Dec 77 - May 82): (citations from the Food Science and Technology Abstracts data base).

Springfield, Va. NTIS 1982. "PB82-867136. ~"Report period covered: Dec 77-May 82. ~Includes index. 274 leaves in various foliations; 28 cm. (NAL Call No.: Z7914.03F6).

# FOOD STORAGE, FIELD CROP

#### 1319

Controlled atmosphere storage (Preserving grain).
Hyde, M.B. Burrell, N.J. St. Paul, Minn.:
American Association of Cereal Chemists, 1982.
Storage of cereal grains and their products,
3rd ed. / edited by Clyde M. Christensen.
Literature review. p. 443-478. ill. 5 p. ref.
(NAL Call No.: SB190.C43 1982).

# FOOD STORAGE, HORTICULTURAL CROP

#### 1320

Responses of horticultural commodities to modified atmospheres: an overview of published literature and future research needs.

Kader, A.A. Beaverton, Or.: Timber Press, (1982). Proc. Third Natl. Controlled Atmosphere Research Conf. on Controlled Atmospheres for Storage and Transport of Perishable Agric. Commodities, July 22-24, 1981, Ore. State Univ., Corvallis / D.G. Richardson, M.M. Meheriuk, eds. p. 229-233. 4 ref. (NAL Call No.: TP373.3.C66 1982).

#### 1321

Sprout inhibition in tubers and bulbs (Potatoes, onions, Solanum, Allium).

Matsuyama, A. Umeda, K. Boca Raton, Fla.: CRC Press, c1983. Preservation of food by ionizing radiation / editors, E.S. Josephson, M.S. Peterson. Literature review. p. 159-213. ill. Includes references. (NAL Call No.: TP371.8.P74 V.3).

# MICROBIOLOGY OF FOOD PROCESSING

#### 1322

Aeration (Aerobic fermentation processes). Lee, Y.H.ARFED. Luk, S. New York: Academic Press. Annual reports on fermentation processes. 1983. Literature review. v. 6. p. 101-147. ill. Includes references. (NAL Call No.: QR151.A54).

#### 1323

Autolysis (Yeast, industrial applications, food addition, extension and texturizing). Arnold, W.N. Boca Raton, Fla.: CRC Press, c1981. Yeast cell envelopes: biochemistry, biophysics, and ultrastructure / editor, Wilfred Niels Arnold. Literature review. p. 129-137. 38 ref. (NAL Call No.: QK617.5.Y4 VOL. 2).

#### 1324

Automation and optimization of fermentation processes.

Bull, D.N.ARFED. New York: Academic Press. Annual reports on fermentation processes. 1983. Literature review. v. 6. p. 359-375. Includes references. (NAL Call No.: QR151.A54).

#### 1325

Engineering at the microorganism scale (Fermentation).

Bungay, H.R.ARFED. Bungay, M.L.; Haas, C.N. New York: Academic Press. Annual reports on fermentation processes. 1983. Literature review. v. 6. p. 149-173. ill. Includes references. (NAL Call No.: QR151.A54).

#### 1326

Microbial oils and fats: an assessment of their commercial potential (Algae, yeasts, fungi).
Ratledge, C.PIMRA. Amsterdam: Elsevier
Scientific Publishing. Progress in industrial microbiology. 1982. Literature review. v. 16. p. 119-206. 251 ref. (NAL Call No.: 448.2 H653).

#### 1327

Recent advances in D-xylose conversion by yeasts (Carbohydrate derived from woods, food processing).

Gong, C.S.ARFED. New York: Academic Press. Annual reports on fermentation processes. 1983. Literature review. v. 6. p. 253-297. ill. Includes references. (NAL Call No.: QR151.A54).

# MICROBIOLOGY, FIELD CROP

#### 1328

Idli, an Indian fermented food: a review (Prepared from black gram (Phaseolus mungo), rice (Oryza sativa)).

Reddy, N.R.JFQUD. Sathe, S.K.; Pierson, M.D.; Salunkhe, D.K. Westport: Food & Nutrition Press. Journal of food quality. 1981.

Literature review. v. 5 (2). p. 89-101. ill. 3 p. ref. (NAL Call No.: TP373.5.J6).

### FOOD CONTAMINATION AND TOXICOLOGY

1329

Analytical methods for sulfonamides in foods and feeds. I. Review of methodology (Food hygiene, feed additives, chemical analysis). Horwitz, W.JANCA. Arlington: The Association. Journal of the Association of Offical Analytical Chemists. Jan 1981. Literature review. v. 64 (1). p. 104-130. ill. 94 ref. (NAL Call No.: 381 AS7).

1330

Biological characteristics of the aflatoxin-induced hepatic tumor (Aspergillus flavus).

Woodhead, A.D. New York: Plenum Press, c1982. Genetic toxicology: an agricultural perspective / edited by Raymond A. Fleck and Alexander Hollaender. Literature review. p. 127-148. ill. 103 ref. (NAL Call No.: RA566.G44).

1331

Controlling cadmium in the human food chain: a review and rationale based on health effects (Disposal of sludge from municipal wastewater treatment plants on land).

Ryan, J.A.ENVRA. Pahren, H.R.; Lucas, J.B. New York: Academic Press. Environmental research. Aug 1982. Literature review. v. 28 (2). p. 251-302. Includes references. (NAL Call No.: RA565.A1E5).

1332

Effect of food environment on staphylococcal enterotoxin synthesis: a review (Staphylococcus aureus).

Smith, J.L.JFPRD. Buchanan, R.L.; Palumbo, S.A. Ames: International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. June 1983. Literature review. v. 46 (6). p. 545-555. Includes references. (NAL Call No.: 44.8 J824).

1333

Environmental toxicoses in humans (Considers relationship between aflatoxins and human liver cancer).

Shank, R.C. Boca Raton, Fla.: CRC Press, c1981. Mycotoxins and N-nitroso compounds: environmental risks / editor, Ronald C. Shank. Literature review. p. 107-140. ill. 135 ref. (NAL Call No.: RA1242.M94M94 V.1).

1334

Foodborne illness caused by Escherichia coli: A

Kornacki, Jeffrey L.JFPRD. Marth, Elmer H. Ames : International Association of Milk, Food, and Environmental Sanitarians. Extract: Enteropathogenic Escherichia coli (EEC) can be defined as any strain of E. coli that has the potential to cause diarrheal illness. Four major categories of EEC exist. Classical enteropathogenic E. coli (EPEC) commonly refers to serogroups of E. coli historically associated with outbreaks of diarrhea in young children and infants. Facultatively enteropathogenic E. coli (FEEC) are non-EPEC serogroups associated with sporadic diarrhea, and include many serogroups associated with the normal intestinal flora. Enterotoxigenic E. coli (ETEC) is commonly isolated from outbreaks of traveler's diarrhea, and includes those strains which produce a heat-stable enterotoxin (ST) only, a heat-labile enterotoxin(LT) only and those which produce both ST and LT. Many techniques currently exist to determine the presence of enterotoxins produced by a particular strain of E. coli. These include bioassay, tissue culture and in vitro immunological techniques. Of the newer in vitro immunological methods, the staphylococcal coagglutination technique to detect LT seems to have potential for routine use in diagnostic microbiology laboratories. Since large numbers of EEC are necessary for diarrhea, an unsanitary environment is needed for transmission of illness. Presence of EEC varies geographically; however, E. coli diarrhea is not likely to occur in the more hygenic areas of the world, except in occasional common-source outbreaks where the organism has time to replicate in food or water. The following foods have been implicated in documented E. coli diarrheal outbreaks worldwide: meat and meat products, fish, poultry, milk and dairy products, vegetables, baked products, rice formulations, coffee substitutes and water. (author). Journal of food protection. Sept 1982. Literature review. v. 45 (11). p. 1051-1067. Includes 96 references. (NAL Call No.: 44.8 J824).

1335

High-level radioactive wastes / (M. Catherine Grissom, editor).

Grissom, M. Catherine. Oak Ridge, Tenn. U.S. Dept. of Energy, Technical Information Center Springfield, Va. available from the National Technical Information Service 1982. Cover title ~"October 1982 ~Includes indexes. iii, 147, 94 p. : 28 cm. -. (NAL Call No.: Z5862.2.R3H5).

1336

Mechanisms of dietary modification of aflatoxin B1 carcinogenesis (Trout).

Bailey, G. Taylor, M.; Selivonchick, D.; Eisele, T.; Hendricks, J.; Nixon, J.; Pawlowski, N.; Sinnhuber, R. New York: Plenum Press, c1982. Genetic toxicology: an

#### (FOOD CONTAMINATION AND TOXICOLOGY)

agricultural perspective / edited by Raymond A. Fleck and Alexander Hollaender. Literature review. p. 149-165. 50 ref. (NAL Call No.: RA566.G44).

#### 1337

Mechanisms of toxic injury.
Bridges, J.W.ANYAA. Benford, D.J.; Hubbard,
S.A. New York: The Academy. Annals of the New
York Academy of Sciences. 1983. Literature
review. v. 407. p. 42-63. ill. Includes
references. (NAL Call No.: 500 N484).

#### 1338

Metabolic properties of in vitro systems (Toxicology technology).
Dipple, A.ANYAA. Bigger, C.A.H. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 26-33. Includes references. (NAL Call No.: 500 NARA)

#### 1339

Mutagens in cooked food.

Sugimura, T. New York: Plenum Press, c1982.

Genetic toxicology: an agricultural
perspective / edited by Raymond A. Fleck and
Alexander Hollaender. Literature review. p.
243-269. ill. 110 ref. (NAL Call No.:
RA566.G44).

#### 1340

Mutation systems in cultured mammalian cells (Toxic chemical testing).
Chu, E.H.Y.ANYAA. New York: The Academy.
Annals of the New York Academy of Sciences.
1983. Literature review. v. 407. p. 221-230.
Includes references. (NAL Call No.: 500 N484).

#### 1341

Occurrence of N-nitroso compounds in the environment (Formation and persistence).

Shank, R.C. Boca Raton, Fla.: CRC Press, c1981. Mycotoxins and N-nitroso compounds: environmental risks / editor, Ronald C. Shank. Literature review. p. 155-183. ill. 129 ref. (NAL Call No.: RA1242.M94M94 V.1).

#### 1342

Role of calcium in cytotoxic injury of cultured hepatocytes (Toxicity studies).

Acosta, D.ANYAA. Sorensen, E.M.B. New York:
The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 78-92. ill. Includes references. (NAL Call No.: 500 N484).

#### 1343

The Salmonella mutagenicity assay: promises and problems (Ames toxicity testing).

Prival, M.J.ANYAA. New York: The Academy.

Annals of the New York Academy of Sciences.

1983. Literature review. v. 407. p. 154-163.

Includes references. (NAL Call No.: 500 N484).

#### 1344

Screening of toxic compounds in mammalian cell cultures.

Ekwall, B.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983.

Literature review. v. 407. p. 64-77. ill.

Includes references. (NAL Call No.: 500 N484).

#### 1345

Short-term tests in the framework of carcinogen risk assessment to man (Toxic chemicals testing).

Kroes. R.ANYAA. New York: The Academy. Annals

Kroes, R.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 398-408. Includes references. (NAL Call No.: 500 N484).

#### 1346

The significance of DNA-damage assays in toxicity and carcinogenicity assessment.

Kohn, K.W.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983.

Literature review. v. 407. p. 106-118. Includes references. (NAL Call No.: 500 N484).

#### 1347

Sister chromatid exchange as a test for mutagenic carcinogens (Saccharin, cyclamates, UES).

Wolff, S.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 142-153. Includes references. (NAL Call No.: 500 N484).

#### 1348

Sterol oxides in foodstuffs: a review.
Finocchiaro, E.T.JFPRD. Richardson, T. Ames:
International Association of Milk, Food, and
Environmental Sanitarians. Journal of food
protection. Oct 1983. Literature review. v. 46
(10). p. 917-925. Includes references. (NAL
Call No.: 44.8 J824).

#### 1349

Toxicology: a guide to sources of information / compiled by Philip Wexler.
Wexler, Philip. Bethesda, Md. National Library of Medicine 1981. Abstract: An annotated bibliography presents sources of general information on toxicology for readers who are unfamiliar with the field; it includes abstracting and indexing, serials and data bases, bibliographies, major textbooks, journals, directories, and other reference sources. All titles in the bibliography are available at the National Library of Medicine. (rkm). 18 p.; 28 cm. -. (NAL Call No.: Z7890.T69 F&N E-3901).

#### 1350

Toxicty and carcinogenicity of N-nitroso compounds (Mutagenicity, teratogenicity, metabolism, mechanism of action).

Shank, R.C. Magee, P.N. Boca Raton, Fla.: CRC Press, c1981. Mycotoxins and N-nitroso compounds: environmental risks / editor, Ronald C. Shank. Literature review. p. 185-217. ill. 222 ref. (NAL Call No.: RA1242.M94M94 V.1).

#### 1351

Two-generation saccharin bioassays (Sweeteners).

Arnold, D.L.EVHPA. Research Triangle Park: National Institute of Environmental Health Sciences. E H P Environmental health perspectives. Apr 1983. Literature review. v. 50. p. 27-36. Includes references. (NAL Call No.: RA565.A1E54).

#### 1352

The use of cells from rat, mouse, hamster, and rabbit in the hepatocyte primary culture DNA-repair test (Toxicity studies).
McQueen, C.A.ANYAA. Williams, G.M. New York:
The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 119-130. Includes references. (NAL Call No.: 500 N484).

#### 1353

Yersinia enterocolitica and Yesinia enterocolitica-like species: their pathogenicity and significance in foods.
Zink, D.L.JFSAD. Lachica, R.V.; Dubel, J.R. Westport: Food & Nutrition Press. Journal of food safety. 1982. Literature review. v. 4 (4). p. 223-241. 7 p. ref. (NAL Call No.: TP373.5.J62).

# FOOD CONTAMINATION, DAIRY

#### 1354

The incidence and implications of residues of detergents and sanitizers in dairy products. Dunsmore, D.G.RREVA. New York: Springer. Residue reviews. 1983. Literature review. v. 86. p. 1-63. ill. Includes references. (NAL Call No.: 389.9 R314).

#### 1355

Update on postmilking teat antisepsis (Cows, mastitis, Streptococcus agalactiae, disinfectants).

Pankey, J.W. Cuming, A.L.; Daggett, R.D.; Eberhart, R.J.; Farnsworth, R.J. Washington, D.C.: The Council. Annual meeting - National Mastitis Council, Inc. 1983. Literature review. 1983. (22nd). p. 52-103. Includes references. (NAL Call No.: SF967.M3N32).

# FOOD CONTAMINATION, FIELD CROP

### 1356

Mycotoxins: occurrence in the environment (Fusarium toxins, aflatoxin, ochratoxin). Ciegler, A. Burmeister, H.R.; Vesonder, R.F.; Hesseltine, C.W. Boca Raton, Fla.: CRC Press, c1981. Mycotoxins and N-nitroso compounds: environmental risks / editor, Ronald C. Shank. Literature review. p. 1-50. ill. 385 ref. (NAL Call No.: RA1242.M94M94 V.1).

# FOOD CONTAMINATION, HORTICULTURAL CROP

#### 1357

Poisonous fungi: mushrooms (Toxicity towards humans, clinical treatment).

Vergeer, P.P. New York: Marcel Dekker.

Mycology series. 1983. Literature review. v. 3 (pt.B). p. 373-412. ill. Includes references. (NAL Call No.: QK600.S4).

# FOOD CONTAMINATION, FISH AND AQUATIC

#### 1358

Marine food-borne dinoflagellate toxins.
Baden, D.G.IRCYA. New York: Academic Press.
International review of cytology. 1983.
Literature review. v. 82. p. 99-150. 111.
Includes references. (NAL Call No.: 442.8
IN82).

### **FOOD PACKAGING**

1359

Internal corrosion and shelf-life of food cans and methods of evaluation.

Mannheim, Chaim. CRFND. Passy, Nehama. Boca Raton : CRC Press. Abstract: Those involved in the technologies for manufacturing food cans must consider the mechanisms of electrochemical corrosion, methods for their measurement, and prediction of shelf life of canned foods. Internal corrosion with food cans is typified by electrochemical metallic dissolution which can result in organoleptic changes in the food, loss of vaccuum, selling, leaking, and possible toxic effects when lead from cans is dissolved in the food. Other changes caused by internal corrosion of sealed food cans are discussed. Specific aspects of canning tecahnology are discussed including: structure of the tinplate used for food cans; timplate corrosion; the corrosion process; toxicity of dissolved metals; and methods of evaluating corrosion and shelf life. (wz). CRC critical reviews in food science and nutrition. 1982. Literature review. v. 17 (4). p. 371-407. ill., charts. Includes 201 references. (NAL Call No.: TP368.C7).

# FOOD PACKAGING, LIVESTOCK

#### 1360

Vacuum packaging of fresh beef: a review. Seideman, S.C.JFQUD. Durland, P.R. Westport: Food & Nutrition Press. Journal of food quality. 1983. Literature review. v. 6 (1). p. 29-47. Includes references. (NAL Call No.: TP373.5.J6).

### **FOOD ADDITIVES**

#### 1361

Butylated hydroxytoluene (BHT): a review (Food additives, antioxidants).

Babich, H.ENVRA. New York: Academic Press. Environmental research. Oct 1982. Literature review. v. 29 (1). p. 1-29. Includes references. (NAL Call No.: RA565.A1E5).

#### 1362

#### Carotenoids as food colorants.

Gordon, Howard T.CRFND. Bauernfeind, J. Christopher. Boca Raton : CRC Press. Abstract: The synthesis, regulatory status, stability in food, and food coloring applications of carotenoids are reviewed, with major attention paid to the latter aspects. Over 350 carotenoid compounds of known structure have been identified to date. The food coloring applications for carotenoids covered (principally, beta-carotene) include; oils, lard and shortening; salad dressings; numerous dairy and dairy-type products; frozen and dried egg yolk products; meat and simulated meat products; fish products; tomato base products; bakery products; pasta; juices and beverages; confectionery; and popcorn. Other applications also are cited. A limited technology exists on current synthetic carotenoid food colors due both to their inherent characteristics and their recent development (compared to other food colors). Food coloring carotenoids have advantages which include high tinctorial potency, fat-solubility and water emulsion capability, the presence of some vitamin A activity, and stability under various conditions, including exposure to light, and to acid and neutral pH conditions found in food products. (wz). CRC critical reviews in food science and nutrition. 1982. Literature review. v. 18 (1). p. 59-97. ill., charts. Includes 82 references. (NAL Call No.: TP368.C7).

#### 1363

Carotenoids as food colorants (Food additives). Gordon, H.T.CRFNP. Bauernfeind, J.C. Boca Raton: CRC Press. CRC critical reviews in food science and nutrition. 1982. Literature review. v. 18 (1). p. 59-97. ill. 82 ref. (NAL Call No.: TP368.C7).

#### 1364

# Cyclamate bibliography / prepared by Calorie Control Council.

Calorie Control Council. Atlanta, Ga. (5775 Peachtree-Dunwoody Road, Suite 500D Atlanta 30342 The Council (1981?). Abstract: References to technical publications on studies and reports concerning cyclamates are compiled (without annotations) for nutrition and food safety personnel, and health policy makers. Topics include: cyclamate and saccharin, cyclamate metabolism, animal tests, biological and biochemical effects of cyclamate, possible carcinogenicity, toxicity studies, analytical

methods, and review articles. This compilation was developed by an association of manufacturers and suppliers of dietary foods and beverages. (wz). 21 p.; 22 cm. (NAL Call No.: Z5776.C4C3 F&N C-2508).

#### 1365

Flavor potentiators (Used as food additives, monosodium glutamate (MSG), inosine 5'-monophosphate (IMP), guanosine 5'-monophosphate (GMP)).

Maga, J.A.CRFND. Boca Raton: CRC Press. CRC critical reviews in food science and nutrition. 1983. Literature review. v. 18 (3). p. 231-312. ill. Includes references. (NAL Call No.: TP368.C7).

#### 1366

Food additives / compiled by Diana Niskern. Niskern, Diana. Washington, D.C. Library of Congress, Science and Technology Division, Science Reference Section 1982. "Updates TB 73-12.". 9 p.; 28 cm. (NAL Call No.: Z5776.C4N57 1982).

#### 1367

Phospholipids in foods (Mar 75 - Feb 83): citations from the Food Science and Technology Abstracts data base / New England Research Application Center.

Springfield, Va. National Technical Information Service 1983. "Feb 83. ~Report period covered: Mar 75 - Feb 83 ~NW6684 ~PB83-860882 ~Includes index. 1 v. (various pagings); 29 cm. (NAL Call No.: Z5776.C4P52).

#### 1368

Saccharin bibliography / prepared by Calorie Control Council.

Calorie Control Council. Atlanta, Ga. (5775 Peachtree-Dunwoody Road, Suite 500D Atlanta 30342) The Council (1981?). Abstract: References (without annotations) to technical publications related to saccharin are provided for nutrition and food safety personnel, and health policy makers. Categories covered include: animal and other testing, saccharin-related studies, epidemiologic studies, saccharin impurities, regulatory and congressional action, and policy questions concerning saccharin's use and safety as a sugar substitute. The list was compiled by an association of manufacturers and suppliers of dietary foods and beverages. (wz). 29 p. in various pagings ; 22 cm. (NAL Call No.: Z5776.C4C32 F&N C-2507).

#### 1369

Sister chromatid exchange as a test for mutagenic carcinogens (Saccharin, cyclamates, UES).
Wolff, S.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983.
Literature review. v. 407. p. 142-153. Includes references. (NAL Call No.: 500 N484).

#### 1370

Two-generation saccharin bioassays (Sweeteners).
Arnold, D.L.EVHPA. Research Triangle Park:
National Institute of Environmental Health

Sciences. E H P Environmental health perspectives. Apr 1983. Literature review. v. 50. p. 27-36. Includes references. (NAL Call No.: RA565.A1E54).

201

# FOOD ADDITIVES, LIVESTOCK

1371

Alternatives to the current use of nitrite in foods : part 2 of a 2-part study / by the Committee on Nitrite and Alternative Curing Agents in Food, Assembly of Life Sciences. Assembly of Life Sciences (U.S.) ~ Committee on Nitrite and Alternative Curing Agents in Food. Washington, D.C. National Academy Press 1982. Abstract: A 2-part study on the health effects of nutrite and related compounds (nitrate, N-nitroso compounds), was performed by the US National Research Council Committee on Nitrite and Alternative Curing Agents in Food. The purpose of the study was to review the research status and future prospects for developing feasible alternatives to nutrite use as a food preservative. The most promising alternative to nutrite use in bacon is the use of alpha-tocopherol (500 mg/kg) in combination with ascorbate (550 mg/kg) and sodium nitrite (120 mg/kg), which significantly reduces nitrosamines formation. Mutagenicity tests (and possible animal toxicity tests) should be conducted on this combination. The effect of the combination of ascorbate and tocopherol on nitrite's anti-botulinal activity in bacon and other cured-meat products also should be tested. Irradiation with/without nitrite appears to be effective against C. botulinum in several cured-meat products, but further work is needed. Other potential nitrite alternatives requiring further evaluation include lactic acid bacteria, sodium hypophosphite, fumarate esters, and potassium sorbate plus low (40-80 mg/kg) nutrite. (wz). ca. 275 p. : ill. ; 28 cm. Includes bibliographies. (NAL Call No.: TX553.A3A7 F&N B-3422).

# FOOD ADDITIVES, HORTICULTURAL CROP

#### 1372

A review of oleoresin black pepper and its extraction solvents (Spices).

Pagington, J.S.PEFLD. Wheaton: Allured Publishing Corp. Perfumer & flavorist. Aug/Sept 1983. Literature review. v. 8 (4). p. 29-32, 34, 36. ill. Includes references. (NAL Call No.: TP983.A1P4).

## **FOOD COMPOSITION**

1373

Application of near infrared spectrophotometry to the nondestructive analysis of foods: a review of experimental results.

Polesello, A.CRFND. Giangiacomo, R. Boca Raton: CRC Press. CRC critical reviews in food science and nutrition. 1983. Literature review. v. 18 (3). p. 203-230. ill. Includes references. (NAL Call No.: TP368.C7).

1374

Aspects of sample preparation for freeze-fracture/freeze-etch studies of proteins and lipids in food systems. A review. Buchheim, W.FMICDK. AMF O'Hare: Scanning Electron Microscopy, Inc. Food microstructure. 1982. Literature review. v. 1 (2). p. 189-208. ill. Includes references. (NAL Call No.: TX543.F66).

1375

Capillary chromatography of foods (Jul 73 - Oct 82): (citations from the Food Science and Technology Abstracts data base).

Springfield, Va. NTIS 1982. "PB83-852095. ~"Report period covered: Jul 73-Oct 82. ~Includes index. 103 leaves in various foliations; 28 cm. (NAL Call No.: Z5776.C4C37).

1376

Chemical, biochemical, functional, and nutritional characteristics of collagen in food systems.

Asgnar A AFREA Henrickson P. L. New York

Asghar, A.AFREA. Henrickson, R.L. New York: Academic Press. Advances in food research. 1982. Literature review. v. 28. p. 231-372. ill. 40 p. ref. (NAL Call No.: 389 M87).

1377

Current methods of caffeine determination: review of the literature, 1975-1980.

Tobias, D.Y. Washington, D.C.: The Administration. FDA by-lines - Food and Drug Administration. July 1982. Literature review. v. 12 (3). p. 129-156. ill. Includes references. (NAL Call No.: TX501.A1U55).

1378

Effects of freezing rate on meat quality.
Berry, B.W. San Antonio: Research and
Development Associated for Military Food and
Packaging Systems, Inc. Activities report of
the R & D Associates. 1983. Literature review.
v. 35 (1). p. 113-142. 8 p. ref. (NAL Call No.:
389.9 AS74A).

1379

Extraction with supercritical fluids: a progress report from Germany.

Mangold, H.K. Champaign: The Society. Journal of the American Oil Chemists' Society. Sept 1982. Literature review. v. 59 (9). p. 673A-674A. 15 ref. (NAL Call No.: 307.8 J82).

1380

Extrinsic tagging in iron bioavailability research: a critical review (Iron absorption). Consaul, J.R.JAFCA. Lee, K. Washington: American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1983. v. 31 (4). p. 684-689. Includes references. (NAL Call No.: 381 J8223).

1381

Fat-soluble vitamins.

Rosemont : National Dairy Council. Abstract: District differences in nutritional function of the lipid-soluble (aqueous-insoluble) vitamins (A, D, E, and K) are reviewed. Vitamin D is a precursor of at least 1 hormone (1,25-dihydroxycholecalciferol), needed for calcium and phosphorus metabolic regulation. Vitamin K controls the synthesis of blood clotting factors, and may have additional functions as suggested by the finding of vitamin K-dependent proteins in certain tissues (e.g., bone). With the exception of vitamin A's established role in visual acuity, less is known on the mode of action of vitamins A and E than is known of D and K. Evidence suggests that vitamin E serves as a biological antioxidant against lipid peroxidation in membranes, while selenium, present with glutathione peroxide, provides a secondary defense against such peroxidation. Fat-soluble vitamin deficiencies from dietary inadequacies are rare in the US. However, since certain of these (vitamins A and D) are stored in body lipids, toxicity from high dietary intakes can occur. Synthetic analogs of these vitamins also are used. Vitamin A is used to treat acne vulgaris, to enhance immune function, and to prevent or treat epithelial cancer; D metabolites are used in therapy for vitamin D-resistant rickets and E in treating diseases having impaired vitamin E usage. (wz). Dairy Council digest. May/June 1982. Literature review. v. 53 (3). p. 13-17. Includes 82 references. (NAL Call No.: 389.8 D14).

1382

Food protein sources: Implications for nutrient requirements.

Young, Vernon R. New York: A.R. Liss, 1981. Abstract: Fundamental consideration is given to the food composition of different protein foods, and the implications of chemical compositional differences of food proteins for satisfying consumer nutrient requirements and nutritional well-being are discussed. Examples

are used to emphasize the complexity of the interrelationships between food proteins and the utilizations of (and requirements for) nutrients. Based upon this review, it is evident that, while considerations of different food proteins relative to amino acid and nitrogen requirements represent an important basis for evaluating the role of food protein sources in human nutrition and health, such considerations represent only an initial basis for such evaluations. Different food protein sources influence the utilization and requirements for a number of nutrients in various ways. Nutrient interations that might modify human nutrient requirements also are considered. (wz). Nutrition in the i980's--the constraints on our knowledge. Literature review. p. 189-206. ill., charts. Includes 52 references. (NAL Call No.: QPi4i.AiW4 1980 F&N B3160)

#### 1383

Glucosinolates and their breakdown products in food and food plants.

Fenwick, G.R.CRFND. Heaney, R.K.; Mullin, W.J. Boca Raton: CRC Press. CRC critical reviews in food science and nutrition. 1983. Literature review. v. 18 (2). p. 123-201. 111. 512 ref. (NAL Call No.: TP368.C7).

#### 1384

Heterocyclic compounds in flavors and fragrances. III. Pyridine and derivatives (Foods).

Vernin, G.PEFLD. Wheaton: Allured Publishing Corp. Perfumer & flavorist. Oct/Nov 1982. Literature review. v. 7 (5). p. 23-26, 28-35. ill. i42 ref. (NAL Call No.: TP983.AiP4).

#### 1385

In vitro measurement of effects of processing on protein nutritional quality (Foods). Swaisgood, H.E.JFPRD. Catignani, G.L. Ames: International Association of Milk, Food, and Evironmental Sanitarians. Journal of food protection. Nov 1982. Literature review. v. 45 (13). p. 1248-1256. ill. 49 ref. (NAL Call No.: 44.8 J824).

#### 1386

Legume-based fermented foods: Their preparation and nutritional quallity.

Reddy, N.R.CRFND. Pierson, M.D.; Sathe, Shridhar K.; Salunkhe, D.K. Boca Raton: CRC Press. Abstract: The production of various legume-based fermented foods is reviewed and their nutritional quality is critically assessed. These foods, which are popular in Southeast Asia, the Near East, and parts of Africa, and in these places form an appreciable part of the daily diet are a main source of protein, calories, and certain minerals. The

fermentation process both improves the organoleptic quality of legumes and enhances their nutritional quality. Food items addressed in detail are: soy sauce, tempeh, meitauza, miso, natto, sufu, soybean and other legume milks, kenima, oncom, waries, papadams, dhokla, khaman, idli, dawadawa, and other legume-fermented foods. Compositional information on these foods is presented. (wz). CRC critical reviews in food science and nutrition. i982. Literature review. v. i7 (4). p. 335-370. ill., charts. Includes i25 references. (NAL Call No.: TP368.C7).

#### 1387

Methods of vitamin assay for nutrition evaluation of food processing.

Gregory III, J.F.FOTEA. Chicago: Institute of Food Technologists. Abstract: Analytical methods are critically important for the nutritional evaluation of food processing and routine monitoring. Assay methods should accommodate the analysis of large numbers of samples. The author discussed various methos used for vitamin extraction and analysis which include microbiological assays; automated spectrophotometric analysis; high-performance liquid chromatography; ligand-binding assays; and enzymatic assays. Regardless of what method is used the result must be an accurate reflection of the biological activity of the specific vitamin as opposed to its bioavailability (absorption and metabolic requirements). (kbc). Food technology. Jan 1983. Literature review. v. 37 (i). p. 75-80. charts. Includes 95 references. (NAL Call No.: 389.8 F7398).

#### 1388

Moderate amounts of alcoholic beverages and clinical nutrition.

McDonald, Janet. Dakland, Calif., Society for Nutrition Education. Abstract: Five clinical aspects of moderate alcohol intake are discussed through a review of the literature. The 5 aspects are: the effect of ethanol on nutrition absorption; alcohol use while on a low-sodium diet; alcohol consumption by diabetics; the relationship between alcohol use and heart disease; and alcohol consumption during old age and confinement. Discussion stresses the proper definition of moderate consumption and suggests ways to quantify it. (kbc). Journal of nutrition education. June 1982. v. i4 (2). p. 58-60. charts. 37 ref. (NAL Call No.: TX341.J6).

#### 1389

Nutrient contents of table-ready foods: Cooked, processed and stored.

Hagen, Richard E.CONUD. Schweigert, Bernard S. Minneapolis: General Mills. Abstract: The effects of modern food processing on nutrient retention in processed food products are reviewed with respect to specific

macronutrients (protein, carbohydrates, fats), fiber, and micronutrients (vitamins, trace minerals). On the basis of various tests (chemical, microbiological, or animal studies), food scientists have generally concluded that table-ready (i.e., processed and preserved) foods contain about the same levels of nutrients, regardless of the type of food processing used; numerous exceptions, however exist. These exceptions are caused by the wide natural variability in nutrient levels in foods, and occasional deficiencies in the ability of some of the tests to accurately reveal biologic utilization by humans. Hence, certain vitamins and minerals may interact with other food chemicals to reduce biologic availability. The variety and amount of foods eaten (rather than specific food cooking or processing methods) serve most to ensure adequate nutrient intakes. (wz). Contemporary nutrition. Feb 1983. Literature review. v. 8 (2). p. 1-2. Includes 19 references. (NAL Call No.: TX341.C62 F&N).

#### 1390

Phospholipids in foods (Mar 75 - Feb 83) : citations from the Food Science and Technology Abstracts data base / New England Research Application Center.

Springfield, Va. National Technical Information Service 1983. "Feb 83. "Report period covered: Mar 75 - Feb 83 ~NW6684 ~PB83-860882 ~Includes index. 1 v. (various pagings); 29 cm. (NAL Call No.: Z5776.C4P52).

#### 1391

Quantifying reactions influencing quality of foods: texture, flavor and appearance. Lund, D.B.JFPPD. Westport: Food & Nutrition Press. Journal of food processing and preservation. Sept 1982. Literature review. v. 6 (3). p. 133-153. 3 p. ref. (NAL Call No.: TX599.J6).

#### 1392

Radiation chemistry of water soluble food components (Preservation techniques).
Simic, M.G. Boca Ration, Fla.: CRC Press, c1983. Preservation of food by ionizing radiation / editors, E.S. Josephson, M.S. Peterson. Literature review. p. 1-73. ill. Includes references. (NAL Call No.: TP371.8.P74 V.2).

#### 1393

Seventy years of the Maillard reaction (Louis Camille Maillard, 1878-1936, Food Chemistry, France).

Kawamura, S.ACSMC. Washington: The Society. ACS Symposium series - American Chemical Society. 1983. Literature review. 1983. (215). p. 3-18. Includes references. (NAL Call No.: QD1.A45).

#### 1394

Sterol oxides in foodstuffs: a review. Finocchiaro, E.T.JFPRD. Richardson, T. Ames: International Association of Milk, Food, and Environmental Sanitarians. Journal of food protection. Oct 1983. Literature review. v. 46 (10). p. 917-925. Includes references. (NAL Call No.: 44.8 J824).

#### 1395

Synthetic routes to 2-hydroxy-3-methylcyclopent-2-en-1-one and related cyclopentane-1,2-diones: a review (Component of the roasted coffee aroma complex and of maple syrup flavor extract). Strunz, G.M.JAFCA. Washington: American Chemical Society. Journal of agricultural and food chemistry. Mar/Apr 1983. Literature review, v. 31 (2). p. 185-190. ill. Includes references. (NAL Call No.: 381 J8223).

#### 1396

Texture profile analysis of processed foods using the tensipresser and the multi-point mensuration method.

Tsuji, S.JTXSB. Westport: Food & Nutrition Press. Journal of texture studies. 1982. Literature review. v. 13 (2). p. 135-186. ill. 3 p. ref. (NAL Call No.: TP156.R45J6).

# FOOD COMPOSITION, DAIRY

#### 1397

Flavour compounds in cheese (Organoleptic properties).
Law, B.A.PEFLD. Wheaton: Allured Publishing Corp. Perfumer & flavorist. Oct/Nov 1982.
Literature review. v. 7 (5). p. 9-12, 14-16, 18, 21. ill. 73 ref. (NAL Call No.: TP983.A1P4).

# FOOD COMPOSITION, LIVESTOCK

#### 1398

Meat flavor: pork and pork products (1972 - Jan 83): (citations from the Food Science and Technology Abstracts data base).

Springfield, Va. NTIS 1983. "PB83-859207. ~"Report period covered: 1972-Jan 83. ~Includes index. 194 leaves in various foliations; 28 cm. (NAL Call No.: Z5776.C4M43).

#### 1399

Post-mortem stimulation of carcasses: effects on biochemistry, biophysics, microbiology, and quality of meat.

Asghar, A.CRFNP. Henrickson, R.L. Boca Raton: CRC Press. CRC critical reviews in food science and nutrition. 1982. Literature review. v. 18 (1). p. 1-58. 401 ref. (NAL Call No.: TP368.C7).

#### 1400

Utilization of electrical stimulation to improve meat quality: a review.
Seideman, S.C.JFOUD. Cross, H.R. Westport: Food & Nutrition Press. Journal of food quality. 1983. Literature review. v. 5 (4). p. 247-269. Includes references. (NAL Call No.: TP373.5.J6).

# FOOD COMPOSITION, FIELD CROP

#### 1401

Biogenic amines in chocolate -- a review. Hurst, W. Jeffrey. NURIB. Martin Jr., Robert A.; Zoumas, Barry L. Los Altos : Geron-X, Inc. Extract: Literature information and data are reviewed and compiled for 4 biogenic amines (tyramine, tryptamine, serotonin, and 2-phenylethylamine) in chocolate liquor and chocolate products (i.e., light and dark chocolates). The average biogenic amine content of the liquors varies considerably from 1 geographical region to another. Furthermore, a variety of foods other than chocolate contain these amines also (especially, tyramine). The average tyramine content of 4 milk chocolates ranged from about 4-12 micrograms/g (ppm); for serotonin, about 1-27 ppm; and 2-phenylethylamine, about 0.4-6.6 ppm. Tryptamine, while not detected in milk or dark chocolates, ranged from abaout 0.5-3.5 ppm in chocolate liquors, depending on the geographical source of the liquor. The data provide the nutrition professional with current values on these amines which tend to increase blood pressure. (wz). Nutrition reports international. Dec 1982. Literature review. v. 26 (6). p. 1081-1086. charts. Includes 30 references. (NAL Call No.: RC620.A1N8).

#### 1402

Chemistry of dry bean proteins (Phaseolus vulgaris, nutritional quality).
Chang, K.C.JFPPD. Satterlee, L.D. Westport: Food & Nutrition Press. Journal of food processing and preservation. Dec 1982. Literature review. v. 6 (4). p. 203-225. 6 p. ref. (NAL Call No.: TX599.J6).

#### 1403

A comparison of microwave, air oven and moisture meters with the standard method for rough rice moisture determination (Grain quality).

Noomhorm, A.TAAEA. Verma, L.R. St. Joseph: The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Sept/Oct 1982. Literature review. v. 25 (5). p. 1464-1470. ill. 19 ref. (NAL Call No.: 290.9 AM32T).

#### 1404

Industrial uses of dry-milled corn products (Food, feed, fiber).

Shukla, T.P. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 489-522. ill. 5 p. ref. (NAL Call No.: SB188.2.C368).

#### 1405

Modification of proteins for functional and nutritional improvements (Cereals, quality). Nakai, S. Powrie, W.D. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 217-242. ill. 7 p. ref. (NAL Call No.: SB188.2.C368).

#### 1406

Phytates in legumes and cereals (Nutritional significance of phytic acid).
Reddy, N.R.AFREA. Sathe, S.K.; Salunkhe, D.K.
New York: Academic Press. Advances in food research. 1982. Literature review. v. 28. p.
1-92. ill. 18 p. ref. (NAL Call No.: 389 M87).

# FOOD COMPOSITION, HORTICULTURAL CROP

1407

Biorenewable solvents for vegetable oil extraction.

Hron, R.J. Sr. Koltun, S.P.; Graci, A.V. Jr. Champaign: The Society. Journal of the American Dil Chemists' Society. Sept 1982. Literature review. v. 59 (9). p. 674A, 676A, 678A, 680A, 682A, 684A. 72 ref. (NAL Call No.: 307.8 J82).

1408

Chemical, biochemical, and biological significance of polyphenols in cereals and legumes.

Salunkhe, O.K.CRFND. Jadhav, S.J.; Kadam, S.S.; Chavan, J.K. Boca Raton : CRC Press. Abstract: A literature review is presented on the polyphenols of cereals (C-glycosylflavones and tannins) and legumes (tannins). The chemistry, biogenesis, isolation and analysis, and occurrence and compostion of polyphenols are examined. Protein interactions, protein distribution patterns, physiological function, and nutritional and health aspects associated wiith tannins also are elaborated. Tannins are reported as having antinutritional properties in cereals and legume seeds. They can exhibit severe negative effects on protein, fat, and carbohydrate utilization of food. The antinutritional activity can be reduced by removing tannins from whole grain or by removing pericap and testa by pearling. Analytical techniques for assay and characterization of the key polyphenols in cereals and legumes have principally involved liquid chromatographic (thin-layer and column) and ultraviolet spectrophotometric approaches. (wz). CRC critical reviews in food science and nutrition. 1982. v. 17 (3), p. 277-305. 111. 219 ref. (NAL Call No.: TP368.C7).

1409

Citrus fruits. II. Chemistry, technology, and quality evaluation. B. Technology (Juices, concentrates, beverages, marmalades, speciality products).

Ranganna, S.CRFND. Govindarajan, V.S.; Ramana, K.V.R. Boca Raton: CRC Press. CRC critical reviews in food science and nutrition. 1983. Literature review. v. 19 (1). 98 p. Includes references. (NAL Call No.: TP368.C7).

1410

Food industry: sunflower oil (Jul 76 - Sep 82): (citations from the Food Science and Technology Abstracts data base).

Springfield, Va. NTIS 1982. "PB82-874835. ~ "Report period covered: Jul 76-Sep 82. ~ Includes index. 217 leaves in various foliations; 28 cm. (NAL Call No.: Z5074.S9F6).

1411

Food industry: vegetable oil (Dec 77 - May 82): (citations from the Food Science and Technology Abstracts data base).

Springfield, Va. NTIS 1982. "PB82-867136. ~"Report period covered: Dec 77-May 82. ~Includes index. 274 leaves in various foliations; 28 cm. (NAL Call No.: Z7914.03F6).

1412

Free sugars and sorbitol in fruits--a compilation from the literature (Fruits, composition, methods, chemical analysis). Wrolstad, R.E.JANCA. Shallenberger, R.S. Arlington: The Association. Journal of the Association of Offical Analytical Chemists. Jan 1981. Literature review. v. 64 (1). p. 91-103. 34 ref. (NAL Call No.: 381 AS7).

1413

Physical, chemical, and nutritional properties of common bean (Phaseolus) proteins.

Sgarbieri, V.C.AFREA. Whitaker, J.R. New York: Academic Press. Advances in food research.

1982. Literature review. v. 28. p. 93-166. ill.

16 p. ref. (NAL Call No.: 389 M87).

1414

Review of apple flavor--state of the art (Malus).

Dimick, P.S.CRFND, Hoskin, J.C. Boca Raton: CRC Press. CRC critical reviews in food science and nutrition, 1983. Literature review. v. 18 (4), p. 387-409. ill. Includes references. (NAL Call No.: TP368.C7).

# FEED PRODUCTS

#### 1415

Impacts of relative price changes of feeds and cattle on the marketing of U.S. beef, 1975-1981: annotated bibliography of publications from the Western Regional Beef Research Project W-145 / edited by C. Richard Shumway and William D. Gorman. -.

Shumway, Charles Richard.; Gorman, William D. Las Cruces: New Mexico State University, Agricultural Experiment Station 1982. Cover title ~"December 1982.". vi, 58 p.; 28 cm. -. (NAL Call No.: 100 N465R no.500).

## FEED PROCESSING AND STORAGE

#### 1416

Barley for food, feed and industry.

Munck, L. St. Paul, Minn.: American
Association of Cereal Chemists, c1981. Cereals,
a renewable resource: theory and practice / Y.
Pomeranz, Lars Munck, editors. Literature
review. p. 427-459. ill. 5 p. ref. (NAL Call
No.: SB188.2.C368).

#### 1417

Bioconversion processes (Cereal crops, foods, beverages, silage, and useful chemicals, biomass production).
Linko, P. Linko, Y.Y. St. Paul, Minn.:
American Association of Cereal Chemists, c1981.
Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors.
Literature review. p. 339-357. 9 p. ref. (NAL Call No.: SB188.2.C368).

#### 1418

Cereals--a renewable resource (for foods, feeds, chemical feedstocks, and fuels).

Pomeranz, Y. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 709-728. 4 p. ref. (NAL Call No.: SB188.2.C368).

#### 1419

Processed feed from straw for ruminants (Nutritional properties).
Kristensen, V.F. Israelsen, M.;
Neimann-Sorensen, A. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 589-610. 6 p. ref. (NAL Call No.: SB188.2.C368).

#### 1420

Storage of high-moisture grain treated with chemicals--a bibliography (Preservatives to prevent damage by micro-organisms, nutritive value of feeds).

Pomeranz, Y. Washington: The Service.

Bibliographies and literature of agriculture: United States, Dept. of Agriculture, Agricultural Research Service. Apr 1982.

Includes subject index ~Bibliography. Apr 1982. (18). 17 p. (NAL Call No.: aZ5076.A1U56).

# MICROBIOLOGY OF FEED PROCESSING

#### 1421

The bioconversion of waste straw into animal feedstuffs.

Seal, K.J. Burrows, I. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 571-588. ill. 4 p. ref. (NAL Call No.: SB188.2.C368).

#### 1422

The fermentation of biomass-current aspects. Eveleigh, D.E.NASSD. New York: Plenum Press. NATO advanced study institutes series. Series A. Life sciences. 1983. Literature review. v. 67. p. 365-391. ill. Includes references. (NAL Call No.: OH301.N32).

#### 1423

Management of silage for increased or decreased fermentation (Lactobacilli additives). Ehle, F.R. Goodrich, R.D. Lexington, Ky.: American Forage and Grassland Council, (1982?). Fantastic forages - feed, fiber or fuel: proceedings of the 1982 Forage and Grassland Conference, Rochester, Minnesota, February 22-24, 1982. Literature review. p. 148-167. 52 ref. (NAL Call No.: SB193.F59 1982).

#### 1424

Microbial processes for the conversion of lignocellulose/hemicellulose residues to energy and feedstuffs.

Detroy, R.W. Freer, S.N.; Cunningham, R.L.; Bothast, R.J. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editorsl. Literature review. p. 359-382. ill. 4 p. ref. (NAL Call No.: SB188.2.C368).

## FEED CONTAMINATION TOXICOLOGY

#### 1425

Animal toxicity of major environmental mycotoxins (Aflatoxins, ochratoxins, trichothecene toxins, sterigmatocystin, zearalenone).

Newberne, P.M. Rogers, A.E. Boca Raton, Fla.: CRC Press, c1981. Mycotoxins and N-nitroso compounds: environmental risks / editor, Ronald C. Shank. Literature review. p. 51-106.ill. 148 ref. (NAL Call No.: RA1242.M94M94 V.1).

#### 1426

Mycotoxins: occurrence in the environment (Fusarium toxins, aflatoxin, ochratoxin). Ciegler, A. Burmeister, H.R.; Vesonder, R.F.; Hesseltine, C.W. Boca Raton, Fla.: CRC Press, c1981. Mycotoxins and N-nitroso compounds: environmental risks / editor, Ronald C. Shank. Literature review. p. 1-50. ill. 385 ref. (NAL Call No.: RA1242.M94M94 V.1).

#### 1427

Review of current DHHS, DOE, and EPA research related to toxicology / National Toxicology Program.

(Research Triangle Park, N.C.) The Program 1981. v.; 28 cm. (NAL Call No.: RA1199.R4).

## FEED COMPOSITION

#### 1428

Analytical methods for sulfonamides in foods and feeds. I. Review of methodology (Food hygiene, feed additives, chemical analysis). Horwitz, W.JANCA. Arlington: The Association. Journal of the Association of Offical Analytical Chemists. Jan 1981. Literature review. v. 64 (1). p. 104-130. ill. 94 ref. (NAL Call No.: 381 AS7).

#### 1429

Foreign evaluation: laboratory techniques (Nutritive value, productive value).
Ferreira, A.M. Collins, M. Madison: The Programs. Publication - Cooperative Extension Programs. University of Wisconsin - Extension. May 1982. Literature review. May 1982. (R3159). 17 p. ill. 4 p. ref. (NAL Call No.: S544.3.W6W53).

#### 1430

Industrial uses of dry-milled corn products (Food, feed, fiber).
Shukla, T.P. St. Paul, Minn.: American Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 489-522. ill. 5 p. ref. (NAL Call No.: SB188.2.C368).

# AGRICULTURAL PRODUCTS - GENERAL

#### 1431

Trends in the chemistry and technology of lipids.
Boelhouwer, C.JJASD. Champaign: The Society.
Journal of the American Oil Chemists' Society.
Feb 1983. Literature review. v. 60 (2). p.
457-462. ill. Includes references. (NAL Call No.: 307.8 J82).

## AGRICULTURAL PRODUCTS - PLANT

#### 1432

Analyses of the inorganic content of cotton dust; a review (Byssinosis, pulmonary disorders in cotton textile workers).

Fornes, R.E.ACSMC. Hersh, S.P.; Tucker, P.A.; Gilbert, R.D. Washington, D.C.: The Society. ACS Symposium series - American Chemical Society. 1982. Literature review. 1982. (189). p. 313-332. 47 ref. (NAL Call No.: QD1.A45).

#### 1433

Biologically active compounds in cotton: an overview (Bract tissue or mill dust, Byssinosis).

Bell, A.A.BCOPB. Stipanovic, R.D. Memphis: National Cotton Council and The Cotton Foundation. Proceedings - Beltwide Cotton Production Research Conferences. 1983. Paper presented at the 7th Cotton Dust Research Conference, San Antonio, Texas, Jan. 3-4, 1983. 1983. (7th). p. 77-80. Includes references. (NAL Call No.: SB249.N6).

#### 1434

Chemistry of dydroxymethyl phosphorus compounds. III. Phosphines, phosphine oxides, and phosphonium hydroxides (Cotton, flame retardant finishes).

Frank, A.W.TRJDA. Daigle, D.J.; Vail, S.L. Princeton: Textile Research Institute. Textile research journal. Dec 1982. Literature review. v. 52 (12). p. 738-750. 198 ref. (NAL Call No.: 304.8 T293).

#### 1435

Chemistry of hydroxymethyl phosphorus compounds. IV. Ammonia, amines, and THPOH (tetrakis(hydroxymethyl)phosphonium hydroxide): a Chemical appraoch to flame retardancy (Cotton textiles).

Daigle, D.J.TRJDA. Frank, A.W. Princeton: Textile Research Institute. Textile research journal. Dec 1982. Literature review. v. 52 (12). p. 751-755. ill. 22 ref. (NAL Call No.: 304.8 T293).

#### 1436

Industrial uses of dry-milled corn products (Food, feed, fiber).

Association of Cereal Chemists, c1981. Cereals, a renewable resource: theory and practice / Y. Pomeranz, Lars Munck, editors. Literature review. p. 489-522. ill. 5 p. ref. (NAL Call No.: SB188.2.C368).

#### 1437

The large scale cultivation of plant cells (Chemicals, pharmaceuticals, pesticides). Fowler, M.W.PIMRA. Amsterdam: Elsevier Scientific Publishing. Progress in industrial microbiology. 1982. Literature review. v. 16. p. 207-229. ill. 52 ref. (NAL Call No.: 448.2 H653).

#### 1438

Mechanisms in byssinosis; a review (Respiratory diseases of cotton, flax, and jute workers). O'Neil, C.E.ACSMC. Butcher, B.T.; Salvaggio, J.E. Washington, D.C.: The Society. ACS Symposium series - American Chemical Society. 1982. Literature review. 1982. (189). p. 145-162. 125 ref. (NAL Call No.: QD1.A45).

#### 1439

Recent advances in microbiology of cotton relevant to byssinosis. I. The bacteria (Fiber from partially opened bolls).

Simpson, M.E.BCOPB. Marsh, P.B.; .Griffin, A.C. Jr.; Rayburn, S.T. Jr.; Halloin, J.M. Memphis: National Cotton Council and The Cotton Foundation. Proceedings - Beltwide Cotton Production Research Conferences. 1983. Paper presented at the 7th Cotton Dust Research Conference, San Antonio, Texas, Jan. 3-4, 1983. 1983. (7th). p. 45-48. Includes references. (NAL Call No.: SB249.N6).

## **HUMAN NUTRITION**

#### 1440

Ascorbic acid technology in agricultural, pharmaceutical, food, and industrial applications (Vitamin C).
Bauernfeind, J.C. Washington: American Chemical Society. Advances in chemistry series. 1982. Literature review. 1982. (200). p. 395-497. ill. 921 ref. (NAL Call No.: 381 AD93).

#### 1441

Evaluation of nutrition interventions : an annotated bibliography and reviw of methodologies and results / by Ann Burgess.
Burgess, Ann. Rome FAO 1982. Includes indexes.
iv, 194 p.; 30 cm. -. (NAL Call No.: TX341.F605 no. 24 1982).

#### 1442

Food in contemporary society: emerging patterns / Stokely-Van Camp Annual Symposium, May 27-29, 1981.

Knoxville Dept. of Nutrition and Food Sciences, University of Tennessee 1981. Abstract: Papers from a symposium that focused on the emerging food patterns in contemporary society (with regards to consumer dietary patterns and practices of the food industry) are presented. Government's role as it affects policy, food and nutrition surveys, USDA's Daily Food Guide, and current eating patterns was analyzed. Industry spokesmen discussed their concerns regarding nitrosamines, high fructose corn sweeteners, and dietary fiber in processed foods. Other topics included energy, surgical intervention, stress-induced eating, and endorphins and enkephalins associated with obesity, along with new research on iodine. Discussion questions are included. (kbc). "Symposium was developed by the Department of Nutrition and Food Sciences in the College of Home Economics with the cooperation of the Department of Food Technology and Science in the Institute of Agriculture.". viii, 200 p. : ill.; 28 cm. Includes bibliographical references. (NAL Call No.: TX345.57 1981 F&N E-3922).

#### 1443

**Human diet** and nutrition / compiled by Kay Rodgers.

Rodgers, Kay: Washington, D.C. Science Reference Section, Science and Technology Division, Library of Congress 1981. Caption title ~"March 1982.". 18 p.; 28 cm. -. (NAL Dall No.: Z6663.N9R64).

#### 1444

Inappropriate priorities. Olson, Robert E. New York : A.R. Liss, 1981. Abstract: Numerous obstacles inhibit the success of nutrition intervention programs, one of which is the establishment of inappropriate priorities. Examples illustrate some of the problems in the areas of nutrition intervention trials, protein-calorie malnutrition, obesity, and coronary heart disease, based on a review of the literature. Failure to recognize the multi-factorial nature of disease and of all ecological relationships that are inherent, represents a serious obstacle that has led to misplaced priorities. In the future, nutritional interventions must be based on sound nutritional science in view of holistic medicine and public health. It is important that positive intervention trials precede public health education in order to minimize the establishment and the use of inappropriate priorities. Further, nutrition scientists should not support politically-motivated public health action programs for which health risks and benefits are unknown. (wz). Nutrition in the 1980's--the constraints on our knowledge. p. 523-537. ill., charts. Includes 35 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1445

Iron status of elderly Americans. Lynch, Sean R.AJCNA. Finch, Clement A.; Monsen, Elaine R.; Cook, James D. Bethesda : American Society for Clinical Nutrition. Extract: Studies of iron nutriture in the elderly are limited, and very few include observations on individuals over age 75. The 2 Health and Nutrition Examination Surveys (HANES) carried out by the US Dept. of Health, Education and Welfare demonstrate that the mean iron intake of Americans is adequate until age 75. However, with changes in the major food sources, there is a decrease in iron derived from meat and a concomitant rise in the the proportion supplied by breakfast cereals. Alterations in dietary iron bioavailability that may result from this have not been studied. Physiological data suggest that the elderly do not represent a target population for iron deficiency since iron requirements are no greater than those of adult men (and lower than those of children and menstruating women). There is little direct evidence of a high prevalence of iron deficiency in the elderly; however, laboratory measurements that have proved useful in defining iron status in younger people have not been standardized for (or extensively used in) older people. Anemia is still the most important known consequence of signifiant iron deficiency. However, the application of Hb (or Hematocrit) standards used in younger people to the elderly (and the assumption that anemia can be equated with iron deficiency) invalidates the conclusions of many surveys. Hb and hematocrit measurements are not suitable screening tests for iron deficiency in the elderly, and there is an urgent need for a clearer understanding of the physiological and nutritional factors responsible for lower. Hb

values in older people (particularly older blacks). (author). American journal of clinical nutrition. Nov 1982. Literature review. v. 36 (5 suppl.). p. 1032-1045. ill., charts. Includes 100 references. (NAL Call No.: 389.8 J824).

#### 1446

Measurement of muscle mass in humans: validity of the 24-hour urinary creatinine method (Nutritional assessment).

Heymsfield, S.B.AJCNA. Arteaga, C.; McManus, C.; Smith, J.; Moffitt, S. Bethesda: American Society for Clinical Nutrition. American journal of clinical nutrition. Mar 1983. Literature review. v. 37 (3). p. 478-494. ill. 81 ref. (NAL Call No.: 389.8 J824).

#### 1447

Methods of food intake assessment -- an annotated bibliography.

Krantzier, Nora J. Mullen, Barbara J.; Comstock, Elizabeth M.; Holden, Cathy A.; Schutz, Howard G.; Grivetti, Louis E.; Meiselman, Herbert L. Dakland, Calif., Society for Nutrition Education. Abstract: An annotated bibliography of 87 citations encompasses research literature on methodological issues in food intake asessment. Citations cover abstracts, articles, and conference proceedings compiled from computerized data bases. Citations are listed alphabetically by author and an abstract accompanies each citation. All entries are summarized (in a table at the article's end) by demographic characteristics, sampling protocol, and study design features. Methodologies covered include weighed intake, 7-day recall, 24-hour recall, dietary history, and observation. (kbc). Journal of nutrition education. Sept 1982. v. 14 (3). p. 108-119. charts. (NAL Call No.: TX341.J6).

#### 1448

Niacin (Nutrient, vitamin).
Henderson, L.M. Palo Alto: Annual Reviews.
Annual review of nutrition. 1983. Literature
review. v. 3. p. 289-307. ill. Includes
references. (NAL Call No.: QP141.A1A63).

#### 1449

Nutrition monitoring : the state of the art, phase two.

Chapel Hill, N.C. The Institute of Nutrition, The University of North Carolina 1982. Abstract: Proceedings of the second workshop in a series focus on how to conduct a survey on the nutritional status of North Carolina's population, with special attention to school children. The workshop is an outgrowth of a previous one that determined such a survey should be undertaken. The goal was to identify pitfalls and resources as the planning stage

advances. Increased interest in nutrition awareness is documented, followed by discussions that included both government and industry representatives. (kbc). Proceedings of a workshop held at McKimmon Center, North Carolina State University, Raleigh on March 25, 1982, sponsored by The Institute of Nutrition. viii, 29, 3 p.; 28 cm. (NAL Call No.: TX360.U6N78 F&N E-3934).

#### 1450

Nutritional anemias: Relationship to genetic and pharmacological factors.

Dallman, Peter R. New York : A.R. Liss, 1981. Abstract: Some common genetic and pharmacological factors that influence the evaluation of anemia are reviewed. On the basis of this review, it was concluded that ethnic background and history of use of common drugs should be included in an individuals's nutritional history documentation when a nutritional anemia diagnosis is considered. Evidence concerning genetic (or racial) and pharmacologic factors is discussed. Two genetic or racial factors must be considered in anemia screening: thalassemia (affecting synthesis rate of hemoglobin globin chains); and potentially low normal hemoglobin levels in blacks. In addition, 2 common pharmacologic factors also should be considered: the use of contraceptives and the use of aspirin. Use of the former by women can be a major influence on iron or folate nutrition; while aspirin, taken in large doses causes intestinal bleeding. All 4 of these factors are discussed in detail. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 87-96. ill. Includes 19 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1451

Nutritional epidemiology.

Rosemont, Ill., National Dairy Council. Abstract: The relationship between dietary factors and chronic degenerative diseases (indicated by epidemiologic studies of group characteristics and the characteristics of individuals within groups) is reviewed. Observational (retrospective, prospective, and historical prospective) and experimental evidence has been examined to discern individual characteristics. The overall details, types of data obtained, and the benefits and limitations of different eipidemiologic approaches to assessing nutritional effects are discussed. The determination of available, reliable dietary intake data is identified as an important factor for meaningful nutritional epidemiology studies. While the results of such studies often do not determine cause and effect factors or provide adequate evidence on which to base recommended dietary practice changes for chronic disease prevention, they do stimulate the development of hypotheses and generate critical questions that stimulate further study. The criteria for evaluating epidemiologic evidence of causality, relative

#### (HUMAN NUTRITION)

to nutritional consequences, are discussed. (wz). Dairy Council digest. July/Aug 1982. Literature review. v. 53 (4). p. 19-23. Includes 57 references. (NAL Call No.: 389.8 D14).

#### 1452

Nutritional quackery (USA, food fads). Young, J.H.QBAOD. Philadelphia: The Association. Quarterly bulletin - Association of Food and Drug Officials. Jan 1983. Literature review. v. 47 (1). p. 3-11. 48 ref. (NAL Call No.: 389.9 AS7Q).

#### 1453

Overcoming design problems in evaluating health behavior programs.

Flay, Brian R. Best, J. Allan. Beverly Hills: Sage Publications. Abstract: The growing reliance of high quality evaluative research to health modification programs is discussed, as it relates to both the paucity of quality evalutions and research design issues. The failure to formulate the most appropriate evaluative research questions and research design deficiencies are stressed as 2 major explanations for the infrequency of controlled, interpretable evaluations. Some 13 research design issues are identified and addressed. These issues must be considered for proper solutions to be obtained from evaluative research questions. Solutions are offered to the identified problem areas and design recommendations are made that strive to minimize or eliminate design problems in evaluating health behavior programs. (wz). Evaluation & the health professions. Mar 1982. Literature review. v. 5 (1). p. 43-69. Includes 45 references. (NAL Call No.: R11.E9 F&N).

#### 1454

Selected bibliographies on nutrition planning and evaluation and on the main types of nutrition intervention.

Cambridge, Mass.: Oelgeschlager, Gunn & Hain, c1981. Nutrition intervention in developing countries: an overview / prepared by the Harvard Institute for International Development; project director James E. Austin. p. 147-208. (NAL Call No.: TX359.H37):

#### 1455

Techniques for needs assessment.

Eash, Maurice J. New York: A.R. Liss, 1981. Abstract: Needs assessment (NA) methodologies, their strengths, weeknesses, biases, and use in program and project design are reviewed and evaluated. Requirements for NA as a starting point for project design have been developed only recently. Factors considered include: population sampling, instrumentation, data collection and time considerations,

misidentified variants and variables, data analysis, and problems associated with inappropiate specifications and generalizations. One of the most critical (but negelected) techniques in NA is population sampling on a systematic basis. The most common instruments used in gathering NA data are questionnaires and interviews. Well-trained data collectors are essential; without this capability, the findings of a NA are suspect. In assessing populations, it is important to select informants having unusual knowledge of needs in order to surmount the problem of misidentifying variants and variables. The findings of a case study concerning the development of a new curriculum in nutrition education by a national nonprofit organization are presented to illustrate the application of NA techniques. (wz). Nutrition in the 1980's -- the constraints on our knowledge. Literature review. p. 399-410. Includes 12 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

## NUTRITION EDUCATION

#### 1456

Children's concepts of health and illness -- and implications for health education: An overview.

Kalnins, Ilze. Love, Rhonda. New York, Human Sciences Press. Abstract: Children's concepts of health and illness in the literature were reviewed using 2 theoretical approaches. Piagetian framework cognitive development was identified and the expectancy theory concepts of salience, vulnerability, and potential health behaviors were addressed. However, neither approach was completely satisfactory in terms of how children see and understand health concepts and behaviors. (kbc). Health education quarterly. Summer/Fall 1982. Literature review. v. 9 (2,3). p. 104-115. Includes 39 references. (NAL Call No.: RA440.AiH5 F&N).

#### 1457

Health maintenance through food and nutrition : a guide to information sources / Helen D. Ullrich.

Ullrich, Helen D. Detroit, Mich. Gale Research Co. c198i. Abstract: An annotated bibliography for nonprofessionals and professionals identifies sources which will provide scientific information about food and nutrition; journal articles, books, pamphlets, leaflets, reports, and teaching aids are listed for each subject. The first of 3 parts covers different aspects of motivation: basic information; nutrients and functions; growth and development; applied conditions (obesity, athletics, dental health, vegetarianism); and clinical nutrition (diet therapy, alcoholism, cancer, diabetes, etc.). A second part covers food as it relates to health. Topics include: general foods; fabricated foods; food composition; world food supply; food preservation and storage; and additives, adulterants, and contaminants. Finally, part 3 deals with individuals and groups: consumers (education, regulations, programs, advertising, surveys); professional and paraprofessional training; government regulations and food programs; bibliographies and information resources. (rkm). Includes indexes. xx, 305 p.; 23 cm. -. (NAL Call No.: Z6663.N9U44 F&N B-3249).

#### 1458

International human nutrition research / prepared by the Joint Subcommittee on Human Nutrition Reseach of the Committee on Health and Medicine and the Committee on Food, Agriculture, and Forestry Research, Federal Coordinating Council on Science, Engineering, and Technology, Office of Science and Technology Policy, Executive Office of the President.

Bethesda, Md. The Subcommittee 1982. Abstract: A comprehensive review of Federal programs in international nutrition research is presented. The 3 sections of the report are: a description of Federal programs in international human nutrition research; critical issues in

international nutrition research and education; and recommendations. Agencies involved in research projects include the following: Department of Health and Human Services, Department of Defense, Agency for International Development, National Science Foundation, and the United States Department of Agriculture. Appendices list the subcommittee membership, the definition of human nutrition research, and tables of expenditures by Federal agencies for human nutrition research. (rkm). "PB82-231739.". xii, 80 p.; 28 cm. -. (NAL Call No.: TX367.I48 F&N E-3891).

#### 1459

Nutrition education and changing behavior. Kolasa, Kathryn M. New York : A.R. Liss, 1981. Abstract: The prevalent view that nutrition education (NE) should cause direct behavior modification in a short period of time is discussed, along with examples of 3 reported kinds of NE intervention programs. The apparent NE objectives of the implementers of these programs are described, together with a view of NE and changing food behavior as integral components of cultural change. One of the more difficult problems of NE is that, while it can increase an individual's or a population's knowledge of food and nutrition, critical food habits may remain unchanged. It is generally agreed that there is not a linear relationship between knowledge of food and nutrition and food behavior practices that are health-promoting. NE educators say we must find better ways to motivate audiences to use the knowledge they have obtained; program planners often say that NE did not and cannot work. The examples discussed illustrate motivation application and cover: NE intervention for school children, a NE intervention effort using mass media, and NE intervention in clinical or therapeutic settings. (wz). Nutrition in the i980's -- the constraints on our knowledge. Literature review. p. 415-422. Includes 17 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1460

Nutrition education research and professional personnel needs for nutrition education of professionals and the public / prepared by the Joint Subcommittee on Human Nutrition Research of the Committee on Health and Medicine and the Committee on Food, Agriculture, and Forestry Research, Federal Coordinating Council on Science, Engineering, and Technology, Office of Science and Technology Policy, Executive Office of the President.

Bethesda, Md. The Subcommittee 1982. Abstract: A comprehensive review of federal nutrition education covers areas of need, including research aspects and training of professional personnel. The 4 sections of the report are: an overview of Federal nutrition education research expenditures for FY 1980 and a review of FY 1977-1980 activities; a description of manpower needs for nutrition education of professionals and the public; a discussion and

#### (NUTRITION EDUCATION)

analysis of the issues; and conclusions and recommendations regarding nutrition education research and personnel needs. DHHS and USDA programs for nutrition education (of the public) are described in the appendix. (rkm). "PB82-231747.". xii, 76 p.; 28 cm. -. (NAL Call No.: TX367.N87 F&N E-3888).

## FOOD SERVICE MANAGEMENT

#### 1461

Computers in nutrition, dietetics and foodservice management : a bibliography / Loretta W. Hoover.

Hoover, Loretta W. (Columbia, Mo.) The Curators of the University of Missouri c1981. Based upon work supported in part by the U.S. Dept. of Agriculture under agreement no. 58-32U4-0-136. v, 31 p.; 28 cm. (NAL Call No.: Z5640.H6).

#### 1462

# The Evolution of computers in dietetics: A review.

Youngwirth, Joni. JADAA. Chicago: The Association. Abstract: Literature on computer applications in dietetics demonstrates that information in this field can be managed by computer-based systems. The historical perspective discussed includes the Computer Assisted Menu Planning (CAMP) plus the development of several other systems. Computer applications (CA) in foodservice management include: inventory control/purchasing systems; forecasting; recipe adjustment; production control; tray assembly and delivery; and menu planning and printing. CA in clinical dietetics include: nutrient analysis; communications; and interviewing and counseling patients. As an instructional tool, the computer can assist in college education, dietetic internships, and continuing education, as well as dietary administration. (kbc). Journal of the American Dietetic Association. Jan 1983. Literature review. v. 82 (1). p. 62-67. Includes 135 references. (NAL Call No.: 389.8 AM34).

#### 1463

Food production management: An update. Roach, Faith R. Denver, American School Food Service Association. Abstract: An annotated bibliography presents 74 references (books and journal articles) categorized under 5 areas related to food production management: food quality; menu planning considerations; productivity; production planning and forecasting; and general. The most referenced areas are food quality (25) and productivity (21). This bibliography updates a previous bibliography published in the Winter of 1979. References, which are selected for a university graduate course in food production management, include a brief description of the content. (wz). School foodservice research review. Summer 1982. Bibliography. v. 6 (2). p. 120-125. (NAL Call No.: LB3473.A153 F&N).

developed and used to analyze the direction of foodservice energy research in this area. Most research has been related to alternate food product flows within foodservice operations, and to increasing the operating efficiency of foodservice equipment. Some researchers have studied the effect of altering operating parameters upon energy expended per unit of production. Because of research cost constraints, ground beef has been a frequently studied commodity. Research using economical bentonite-water dispersions for food models during foodservice energy research was included. Activities, involving the energy-modifications of recipes, revealed energy savings from 11-79%. The need for research methodologies for foodservice energy research was delineated to study all variables (including microbial quality and safety) which influence energy usage during heat processing. The literature was reviewed from 1930 to 1981. (author). Journal of food protection. Aug 1982. v. 45 (10). p. 984-992. charts. Includes 36 references. (NAL Call No.: 44.8 J824).

#### 1465

Student participation, meal costs and meal production in school foodservice programs: a literature review.

(Washington, D.C.) Office of Analysis of Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture 1982. Abstract: A literature review focused on 3 specific topics: factors affecting student participation in school meal programs; the determinants of school meal costs: and economic cost and production functions. Each section contains subsections. The section on student participation considered participation factors, previous research efforts, and case-by-case review. The meal cost section covered definition and measurement of costs, data sources and uses, production models, and a description of selected research. The section on cost and productions reviewed the literature on theory and economic models of cost and production, joint production, (where 2 products, e.g., breakfast and lunch, are produced) and managerial efficiency. The latter part of section 2 and all of section 3 are written for professional economists and statisticians. Citations of published research are followed by a discussion of the researchers purpose, methodology, and results; a critique also is provided. (kbc). ii, 168 p. : iil. ; 28 cm. Bibliography: p. 162-168. (NAL Call No.: LB3475.576 F&N E-3933).

#### 1464

Overview of foodservice energy research: Heat processing.

Unklesbay, Nan.JFPRD. Ames: International Association of Milk, Food, and Environmental Sanitarians. Extract: A conceptual framework for factors affecting energy usage for heat processing in US foodservice operations was

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#### 1466

Absorption and transport of cobalamin (vitamin B12).

Seetharam, B. Alpers, D.H. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 343-369. ill. Includes references. (NAL Call No.: QP141.A1A63).

#### 1467

Analytical methods for nitrosamines--an overview.

Fine, D.H.BANRD. Cold Spring Harbor: Cold Spring Harbor Laboratory. Banbury report. 1982. Literature review. v. 12. p. 165-174. Includes references. (NAL Call No.: QH426.B35).

#### 1468

Bioavailability of trace mineral elements (Dietary).

Forbes, R.M. Erdman, J.W. Jr. Palo Alto: Annual Reviews. Annual review of nutrition. 1983. Literature review. v. 3. p. 213-231. Includes references. (NAL Call No.: QP141.A1A63).

#### 1469

Biogenic amines in chocolate -- a review. Hurst, W. Jeffrey. NURIB. Martin Jr., Robert A.; Zoumas, Barry L. Los Altos : Geron-X, Inc. Extract: Literature information and data are reviewed and compiled for 4 biogenic amines (tyramine, tryptamine, serotonin, and 2-phenylethylamine) in chocolate liquor and chocolate products (i.e., light and dark chocolates). The average biogenic amine content of the liquors varies considerably from 1 geographical region to another. Furthermore, variety of foods other than chocolate contain these amines also (especially, tyramine). The average tyramine content of 4 milk chocolates ranged from about 4-12 micrograms/g (ppm); for serotonin, about 1-27 ppm; and 2-phenylethylamine, about 0.4-6.6 ppm. Tryptamine, while not detected in milk or dark chocolates, ranged from abaout 0.5-3.5 ppm in chocolate liquors, depending on the geographical source of the liquor. The data provide the nutrition professional with current values on these amines which tend to increase blood pressure. (wz). Nutrition reports international. Dec 1982. Literature review. v. 26 (6). p. 1081-1086. charts. Includes 30 references. (NAL Call No.: RC620.A1N8).

#### 1470

Brain structure and its implication in metabolism in aging: A review. Buschmann, MB Tank. AJCNA. Bethesda : American Society for Clinical Nutrition. Abstract: Since the brain is unique in coordinating all body organs and their functions, any alteration in brain structure has important implications for brain metabolism. This is especially true in the case of altered protein syntheses, which in turn, affects brain activity. Gross changes and cellular-level changes in the aging human brain are considered, along with the relevant body of literature concerning research using animal models. The noted increase in our national life expectancy because of improved health care and living standards is of no real benefit if the extended years include functional motor or sensory loss and senility. The pathologic condition known as presentlity affects the young, and accounts for 85% of US patients institutionalized with organic dementia. Normally-aged persons show the same qualitative cellular brain changes as those seen in senility and presenility, with the only apparent difference being the greater number of cellular changes associated with pathologic states. Hence, the correlation between structural and metabolic changes and abnormal behavior is unknown. A relationship does exist, however, between morphologic changes of neuronal aging, protein composition, and behavior. (wz). American journal of clinical nutrition. Oct 1982. Literature review. v. 36 (4, Suppl.). p. 759-765. ill., charts. Includes 76 references. (NAL Call No.: 389.8 J824).

#### 1471

Caffeine (Nutritional aspects).
Dews, P.B. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Review article. v. 2. p. 323-341. ill. Includes references. (NAL Call No.: QP141.A1A63).

#### 1472

Calcium and phosphorus requirements of low birth weight infants: a nutritional and endocrinological perspective. Atkinson, S.A. New York, Nutrition Foundation. Nutrition reviews. Mar 1983. Literature review. V. 41 (3). p. 69-78. 65 ref. (NAL Call No.: 389.8 N953).

#### 1473

Calcium nutrition and bone health in the elderly.

Heaney, Robert P.AJCNA. Gallagher, J.C.; Johnston, C.C.; Neer, Robert.; Parfitt, A. Michael.; Whedon, G. Donald. Bethesda: American Society for Clinical Nutrition. Abstract: A comprehensive review is presented concerning the interrelationships of calcium (Ca) nutriture with bone health. Various aspects of effective Ca intakes, Ca dietary

requirements, and health implications of Ca deficiency in the elderly, and potential toxic effects of high Ca intakes (e.g., hypercalciuria, urinary calculi, chronic renal disease, and milk-alkali syndrome) are addressed. The typical elderly individual is in negative Ca balance, and hence, is losing bone mass. Evidence suggests that inadequate Ca intake may contribute to this loss. Males and females in the US over 65 ingest about 600 and 480 mg/day of Ca, respectively. Elderly Ca intake is less than in the young, and reduced CA absorption efficiency further lowers the effective Ca intake. Excess protein and fiber increase the Ca requirement, while estrogen withdrawal at menopause decreases Ca absorption and renal Ca conservation increasing the Ca requirement. Hence Ca requirements for the elderly exceed the US RDA (800 mg), and data suggest Ca requirements for the elderly should be at least 1200-1500 mg/day. (wz). American journal of clinical nutrition. Nov 1982. Literature review. v. 36 (5 suppl.). p. 986-1013. ill., charts. Includes 184 references. (NAL Call No.: 389.8 J824).

#### 1474

Calcium transport proteins, calcium absorption, and vitamin D.

Wasserman, R.H.ARPHA. Fullmer, C.S. Palo Alto: Annual Reviews Inc. Annual review of physiology. 1983. Literature review. v. 45. p. 375-390. ill. Includes references. (NAL Call No.: 444.8 AN7).

#### 1475

Carnitine (Nutrition).

Borum, P.R. Palo Alto: Annual Reviews. Annual review of nutrition. 1983. Literature review. v. 3. p. 233-259. Includes references. (NAL Call No.: OP141.A1A63).

#### 1476

Cellular folate binding proteins; function and significance (Nutrition).

Wagner, C. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Review article. v. 2. p. 229-248. ill. Includes references. (NAL Call No.: QP141.A1A63).

#### 1477

Cellular immune changes in undernourished children.

McMurray, David N. New York: A.R. Liss, 1981. Abstract: A study was conducted involving 2 groups of children: Group A, 72 children (37 females, 35 males) from a low socioeconomic urban area followed through their first 2 years of life; and Group B, 43 severely malnourished children (22 females, 21 meals) hospitalized and fed a high-protein, high-calorie diet for 4-5 weeks, followed by an at-home 11 month

follow-up period. The study also included tests on experimental animals (specific pathogen-free albino guinea pigs) fed isocaloric diets of different carien protein levels. All children and animals were vaccinated with BCG vaccine. Over half the Group A children were partly malnourished by 1 year of age, although the proportion of severely undderweight children was low and constant. In Group B children, the effect of hospitalization and treatment was most noticeable in the marked increase in serum total proteins and albumin (especially in kwashiorkor children). For BCG response in protein-deficient test animals, the magnitude of skin reaction was notably reduced in low-protein intake animals. Hence, there is little doubt that severe malnutrition has a pronounced effect on disease resistance, mediated largely by immune function impairment. Other facets of this study are discussed. (wz). Nutrition in the 1980's-- the constraints on our knowledge. Literature review. p. 305-318. ill., charts. Includes 17 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1478

The Central control of appetite. Morley, John E. Levine, Allen S. Boston : Little, Brown and Company. Abstract: Recent rapid advances in the understanding of neurotransmitters and their function in the central nervous system for appetite regulation are reviewed. Areas discussed include: the anatomy of feeding; the role of nutrients as appetostats in appetite control; neurotransmitters (e.g., opioid peptides, neuropeptides, certain monoamines, benzodiazepines) and feeding; and appetite set-point theories. Biologic development processes have apparently generated a complex appetite control system, including redundant or accessory regulatory systems that exist to ensure a fail-safe system. Pharmacological evidence suggests that the central regulatory neurotransmitters for appetite control are arranged in a cascade system. Further, similarities between monoaminergic and peptidergic appetite control and central control of analgesia, body temperature, and gastric secretion suggest an overlap in the control of these related life-sustaining processes. Despite the improvement in the understanding of appetite control, the complexity of the mechanisms may frustrate the application of this knowledge to curing obesity. (wz). The Lancet. Feb 19, 1983. Literature review. v. 1 (8321). p. 398-401. ill. Includes 54 references. (NAL Call No.: 448.8 L22).

#### 1479

Chemical senses in the release of gastric and pancreatic secretions (Nutrition).

Brand, J.G. Cagan, R.H.; Naim, M. Palo Alto: Annual Reviews. Annual review of nutrition.

1982. Literature review. v. 2. p. 249-276. ill. Includes references. (NAL Call No.: QP141.A1A63).

#### 1480

Computers in nutrition, dietetics and foodservice management: a bibliography / Loretta W. Hoover.

Hoover, Loretta W. (Columbia, Mo.) The Curators of the University of Missouri c1981. Based upon work supported in part by the U.S. Dept. of Agriculture under agreement no. 58-32U4-0-136. v, 31 p.; 28 cm. (NAL Call No.: Z5640.H6).

#### 1481

## Diet and hypertension: An update on recent research.

Henry, Holly.CONUD. McCarron, David. Minneapolis : General Mills. Abstract: Cardiovascular research into the causes and treatment of hypertension over the past 40 years has lead to a focus on 1 nutrient: sodium. Other nutritional factors, however, may be equally or more important. Further study is needed to assess the possible role of protective factors normally linked to sodium (potassium, calcium, and magnesium balance and essential free fatty acids) that might influence hypertension. Further, restricting sodium intake may exclude certain foods and have, as an inherent risk, the loss of such potentially protective factors. The role of dietary factors on blood pressure is examined, specifically the relative contributions of: calories, sodium, chloride, potassium, calcium, magnesium, free fatty acids, protein, alcohol consumption, and micronutrients. (wz). Contemporary nutrition. Nov 1982. Literature review. v. 7 (11). p. 1-2. Includes 29 references. (NAL Call No.: TX341.C62 F&N).

#### 1482

# Dietary restriction and its effects on immunity and aging.

Weindruch, Richard H. Makinodan, Takashi. New York : A.R. Liss, 1981. Abstract: Results of animal studies using experimental protocols to influence the aging process are discussed, covering both weaning- and adult-initiated food restrictions. In contrast to weaning-initiated food restriction, underfeeding started in adulthood has received much less attention regarding lifespan-disease-immunosenescent effects. The present findings suggest that adult-onset underfeeding may positively influence these processes. The model of dietary restriction discussed is biogerontologically important for several reasons: weaning-initiated food restriction appears to be the best tool to interfere with aging in mammals (in order to allow for assessment of resulting alterations); underfeeding seems to be a potent means of chronic disease prevention; and lifespan extension in test animals by means of food restriction appears promising. For human applications, only the adult-onset approach seems currently relevant. Strategies, however, should be safely tested for their effects on lifespan duration and life quality with increasing age. (wz). Nutrition in the 1980's -- the constraints on our knowledge.

Literature review. p. 319-325. ill., charts. Includes 34 references. (NAL Call No.: OP141.A1W4 1980 F&N B3160).

#### 1483

The effects of nitrous oxide on cobalamins, folates, and on related events (Vitamin B12, folacin, folic acid).

Chanarin, I.CRTXB. Boca Raton: CRC Press. C R C critical reviews in toxicology. 1982.

Literature review. v. 10 (1). p. 179-213. ill. Includes references. (NAL Call No.: RA1211.A1C7).

#### 1484

Elemental diets / editor, Robin I. Russell. Russell, Robin I. Boca Raton, Fla. CRC Press c1981. Abstract: A review of research on elemental diets discusses their use as a nutritional support method. Information is presented in 4 general areas. The first section covers the normal nutritional state (digestion and absorption), causes and results of nutritional insufficiency, assessment of nutritional status, and methods of providing nutritional supports. A second section discusses the metabolic effects of elemental diets on various aspects of GI tract functions. The third section details clinical uses of elemental diets in a variety of diseases (bowel disease, cancer, burns, pediatrics, and others); problems and hazards of the use of elemental diets are discussed. Finally, clinical uses of elemental diets are summarized and assessed. (rkm). 261 p. : ill. ; 26 cm. Includes bibliographical references and index. (NAL Call No.: RM229.E39 F&N B-3261).

#### 1485

Evidence relating selected vitamins and minerals to health and disease in the elderly population in the United States: Introduction. Young, Eleanor A.AJCNA. Bethesda : American Society for Clinical Nutrition. Abstract: One of the most significant environmental factors modifying aging is nutrition. A comprehensive review is presented covering various aspects of this topic, with specific emphasis on key vitamins (vitamin D, folate, thiamin) and minerals (calcium, iron, zinc) known to be associated with specific disease and disorders in the elderly. Specific objectives to accomplish the overall goal of improving health in the elderly include: evaluation of available scientific data on dietary intake and requirements of the elderly for these key vitamins and minerals; development of a concensus based on the scientific data; preparation of guidance documents and presentations of the findings to a special conference; and identification of specific gaps in knowledge concerning dietary intake and requirements for the elderly. (wz). American journal of clinical nutrition. Nov 1982. Literature review. v. 36 (5 suppl.). p.

979-985. ill., charts. Includes 129 references. (NAL Call No.: 389.8 J824).

#### 1486

Exercise and lipid metabolism. Oscai, Lawrence B. New York : A.R. Liss, 1981. Abstract: A brief overview discusses the effects of acute exercise and exercise training on lipid metabolism in humans and animals. The interrelated topics of circulating lipids and lipoproteins, body weight control, and endurance exposure and lipid metabolism are discussed. Exercise can lower plasma triacylglycerol (TG) levels, and appears to play an important (but unknown) role in lipid or muscle metabolism relative to circulating insulin. Extra weight associated with overfed, lean subjects can be lost quite readily under vigorous exercise. In contrast to milder forms of obesity, however, it is now believed by many that severe obesity (fat constituting about 50% of total body weight) correction is virtually hopeless. Fat oxidation can provide essentially all of the energy needed by working muscles during light-to-moderate exercise. About 50-75% of the free fatty acids required for work are thought to be derived from intramuscular TG hydrolysis, but a TG lipase responsible for lipolysis in muscle has not been identified. Lipoprotein lipase may, however, function as a mobilizer and a regulator of endogenous TG, representing a new role for this enzyme in lipid metabolism (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 383-390. Includes 65 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1487

#### Fat-soluble vitamins.

Rosemont : National Dairy Council. Abstract: District differences in nutritional function of the lipid-soluble (aqueous-insoluble) vitamins (A, D, E, and K) are reviewed. Vitamin D is a precursor of at least 1 hormone (1,25-dihydroxycholecalciferol), needed for calcium and phosphorus metabolic regulation. Vitamin K controls the synthesis of blood clotting factors, and may have additional functions as suggested by the finding of vitamin K-dependent proteins in certain tissues (e.g., bone). With the exception of vitamin A's established role in visual acuity, less is known on the mode of action of vitamins A and E than is known of D and K. Evidence suggests that vitamin E serves as a biological antioxidant against lipid peroxidation in membranes, while selenium, present with glutathione peroxide, provides a secondary defense against such peroxidation. Fat-soluble vitamin deficiencies from dietary inadequacies are rare in the US. However, since certain of these (vitamins A and D) are stored in body lipids, toxicity from high dietary intakes can occur. Synthetic analogs of these vitamins also are used. Vitamin A is used to treat acne vulgaris, to enhance immune function, and to prevent or treat epithelial cancer; D

metabolites are used in therapy for vitamin D-resistant rickets and E in treating diseases having impaired vitamin E usage. (wz). Dairy Council digest. May/June 1982. Literature review. v. 53 (3). p. 13-17. Includes 82 references. (NAL Call No.: 389.8 D14).

#### 1488

Folate nutrition in the elderly. Rosenberg, Irwin H.AJCNA. Bowman, Barbara B.: Cooper, Bernard A.; Halsted, Charles H.; Lindenbaum, John. Bethesda : American Society for Clinical Nutrition. Abstract: Data primarily concerned with the assessment of folate status in the North American elderly are reviewed and evaluated. The mean dietary folate intake in free-living elderly is, in general, probably adequate. In addition to the need for additional reliable data, safe and reasonable dietary goals for folate intake are required. Hospitalized or institutionalized elderly having disease are at greater risk than elderly who are not. Furher, indications are that the poor elderly in the US may be at greater risk for folate deficiency. Evidence for folate deficiency based on blood analysis appears to focus on the lower socioeconomic (mostly blacks and hispanics) elderly as in-patients. Alcohol represents the most important risk factors in folate deficiency among the elderly and non-elderly alike. While certain drugs (e.g., anticonvulsants and sulfasalazine) mayu interfere with folate absorption or utilization, the number of elderly taking such drugs is relatively small. Folate requirements for the elderly do not appear to be different than for younger adults, but further study is needed. Folate deficiency does not seem to contribute to anemia in the elderly. (wz). American journal of clinical nutrition. Nov 1982. Literature review. v. 36 (5 suppl.). p. 1060-1066. ill., charts. Includes 27 references. (NAL Call No.: 389.8 J824).

#### 1489

Food protein sources: Implications for nutrient requirements.

Young, Vernon R. New York : A.R. Liss, 1981. Abstract: Fundamental consideration is given to the food composition of different protein foods, and the implications of chemical compositional differences of food proteins for satisfying consumer nutrient requirements and nutritional well-being are discussed. Examples are used to emphasize the complexity of the interrelationships between food proteins and the utilizations of (and requirements for) nutrients. Based upon this review, it is evident that, while considerations of different food proteins relative to amino acid and nitrogen requirements represent an important basis for evaluating the role of food protein sources in human nutrition and health, such considerations represent only an initial basis for such evaluations. Different food protein sources influence the utilization and requirements for a number of nutrients in various ways. Nutrient interations that might

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modify human nutrient requirements also are considered. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 189-206. ill., charts. Includes 52 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1490

The function of vitamin A: current concepts.

Zile, M.H.PSEBA. Cullum, M.E. New York:

Academic Press. Proceedings of the Society for Experimental Biology and Medicine. Feb 1983.

Literature review. v. 172 (2). p. 139-152. ill.

158 ref. (NAL Call No.: 442.9 S01).

#### 1491

# Hunger and appetite: Old concepts/new distinctions.

Castonguay, Thomas W. NUREA, Applegate. Elizabeth A.; Upton, David E.; Stern, Judith S. Washington, D.C.: Nutrition Foundation. Abstract: Hunger and appetite have physiological bases and are not solely behavioral phenomena. These 2 states in theory can be measured because they are a set of signals which promote the initiation of feeding and guide the choice of food items. Hunger is defined as a set of internal signals that stimulate the acquisition and consumption of food. Appetite refers to a set of signals that guide selection and consumption of specific foods and nutrients. Some of the neurological, physiological, psychological, and cultural bases of hunger and appetite are reviewed. (kbc). Nutrition reviews. April 1983. Literature review. v. 41 (4), p. 101-110. ill. Includes 80 references. (NAL Call No.: 389.8 N953).

#### 1492

# Importance of food in the regulation of gastrin release and formation.

Lichtenberger, L.M.AJPHA. Bethesda: American Physiological Society. American journal of physiology. Dec 1982. Literature review. v. 243 (6). p. G429-G441. ill. 98 ref. (NAL Call No.: 447.8 AM3).

#### 1493

## Indices of the nutritional status of the individual.

Shils, Maurice E. New York: A.R. Liss, 1981. Abstract: The roles and status of clinical laboratory data, anthropometric measurements, biochemical indices, and nutritional assessment protocols are reviewed in terms of their efficacy in evaluating an individual's nutritional status. Seven parameters encompass the multiplicity of approaches for evaluating nutritional status: patient history; a physical examination; clinical evaluation of body composition; anthropometric and developmental

data; examination of organ system functions; assessment of enzymatic and metabolic biochemical function; and potential drug-organ-nutrient interactions. It is essential that follow-up reassessments be made of all patients at suitable intervals to ensure that no deterioration has occurred and to ascertain whether or not new treatments (or modifications of current treatments) should be initiated. In the final analysis, the basic ingredient of a successful nutritional assessment or nutrition intervention program is an experienced nutrition team. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 71-81. charts, forms. Includes 20 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1494

# Intestinal synthesis, secretion, and transport of lipoproteins.

Bisgaier, C.L.ARPHA. Glickman, R.M. Palo Alto: Annual Reviews Inc. Annual review of physiology. 1983. Literature review. v. 45. p. 625-636. ill. Includes references. (NAL Call No.: 444.8 AN7).

#### 1495

Is vitamin E the only lipid-soluble, chain-breaking antioxidant in human blood plasma and erythrocyte membranes (Alpha tocopherol).

Burton, G.W.ABBIA. Joyce, A.; Ingold, K.U. New York: Academic Press. Archives of biochemistry and biophysics. Feb 15, 1983. Literature review. v. 221 (1). p. 281-290. 91 ref. (NAL Call No.: 381 AR2).

#### 1496

#### Lipid digestion and absorption.

Carey, M.C.ARPHA. Small, D.M.; Bliss, C.M. Palo Alto: Annual Reviews Inc. Annual review of physiology. 1983. Literature review. v. 45. p. 651-677. ill. Includes references. (NAL Call No.: 444.8 AN7).

#### 1497

Medium-chain triglycerides: An update.
Bach, Andre C.AJCNA. Babayan, Vigen K. Bethesda: American Society for Clinical Nutrition.
Extract: A review of the literature on the medical and nutritional use of medium-chain triglycerides (MCTs) since 1970 is presented, with additional discussions on the various modifications and applications of the MCTs in the synthesis of certain structured lipids. The metabolism of MCTs in the liver and extrahepatic tissues is discussed, along with the use of MCTs in malabsorption and hyperalimentation, deficiency in the carnitine system, epilepsy, obesity, and other special areas of application are cited. The use of

medium-chain monodiglycerides for dissolving cholesterol gallstones is presented. The contraindications for use of MCTs in ketosis, acidosis, and cirrhosis are also discussed. Suggestions for use of MCTs in a variety of medical and nutritional applications are presented. (author). American journal of clinical nutrition. Nov 1982. Literature review. v. 36 (5). p. 950-962. ill. Includes 128 references. (NAL Call No.: 389.8 J824).

#### 1498

Metabolic adaptations to starvation, semistarvation, and carbohydrate restriction. Aoki, Thomas T. New York : A.R. Liss, 1981. Abstract: Factors related to human fasting are reviewed: normal fuel depots; metabolic changes during brief and prolonged fasts; the roles of glutamine and specific hormones during the fast; the muscle redox state and protein conservation; and metabolic effects of glucose needs on nitrogen metabolism. Human metabolic adaptation to starvation, semi-starvation, and carbohydrate restriction is complex, involving a number of hormones, substrates, and tissues. The need for the ketoacids, beta-hydroxybutric and acetoacetic, to replace glucose as the primary brain fuel for fasting humans appears to be the key to maximum protein conservation. Hence, ketogenesis is needed to provide the brain with a fat-derrived, water-soluble, insulin-independent, glucose-equivalent fuel. This adaptation is associated with a small urinary loss of the ketoacids (100-150 mM or 40-60 calories per day). The ketonuria induces increased renal use of muscle glutamine (derived by proteolysis); administering glucose to meet brain requirements causes ketogenesis suppression during fasting and a decrease in nitrogen mobilization and use. (wz). Nutrition in the 1980's -- the constraints on our knowledge. Literature review. p. 161-177. ill., charts. Includes 29 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1499

Metabolic effects of total parenteral nutrition.

Greig, P.D. Baker, J.P.; Jeejeebhoy, K.N. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 179-199. Includes references. (NAL Call No.: QP141.A1A63).

#### 1500

Methods of food intake assessment -- an annotated bibliography.

Krantzler, Nora J. Mullen, Barbara J.; Comstock, Elizabeth M.; Holden, Cathy A.; Schutz, Howard G.; Grivetti, Louis E.; Meiselman, Herbert L. Oakland, Calif., Society for Nutrition Education. Abstract: An annotated bibliography of 87 citations encompasses research literature on methodological issues in food intake asessment. Citations cover abstracts, articles, and conference proceedings compiled from computerized data bases. Citations are listed alphabetically by author and an abstract accompanies each citation. All entries are summarized (in a table at the article's end) by demographic characteristics, sampling protocol, and study design features. Methodologies covered include weighed intake, 7-day recall, 24-hour recall, dietary history, and observation. (kbc). Journal of nutrition education. Sept 1982. v. 14 (3). p. 108-119. charts. (NAL Call No.: TX341.J6).

#### 1501

Morphological diversity among members of the gastrointestinal microflora (Ruminant and monogastric species).

Savage, D.C.IRCYA. New York: Academic Press. International review of cytology. 1983. Literature review. v. 82. p. 305-334. ill. Includes references. (NAL Call No.: 442.8 IN82).

#### 1502

Nutrition and pregnancy outcome.

Rosemont : National Dairy Council. Abstract: The fetus is vulnerable to a variety of maternal influences including nutrition. Studies have demonstrated the human fetus' vulnerability to severe nutrient deprivations, but not much is known about the consequences of subtle nutritional deficiencies. Influences of cravings and aversions, pica, and adherence to vegetarian diets during pregnancy cannot be made without assessing the total prenatal diet and lifestyle. Maternal age is a major consideration (very young adolescents and women over 30 years). Caffeine does not have demonstrated ill effects upon the fetus, but the detrimental effects of alcohol use are well documented. (kbc). Dairy Council digest. May/June 1983. Literature review. v. 54 (3). p. 13-18. Includes 93 references. (NAL Call No.: 389.8 D14).

#### 1503

Nutritional anemias: Relationship to genetic and pharmacological factors.

Dallman, Peter R. New York : A.R. Liss, 1981. Abstract: Some common genetic and pharmacological factors that influence the evaluation of anemia are reviewed. On the basis of this review, it was concluded that ethnic background and history of use of common drugs should be included in an individuals's nutritional history documentation when a nutritional anemia diagnosis is considered. Evidence concerning genetic (or racial) and pharmacologic factors is discussed. Two genetic or racial factors must be considered in anemia screening: thalassemia (affecting synthesis rate of hemoglobin globin chains); and potentially low normal hemoglobin levels in blacks. In addition, 2 common pharmacologic factors also should be considered: the use of

contraceptives and the use of aspirin. Use of the former by women can be a major influence on iron or folate nutrition; while aspirin, taken in large doses causes intestinal bleeding. All 4 of these factors are discussed in detail. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 87-96. ill. Includes 19 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1504

Nutritional influences on chemical biotransformations in humans. Anderson, Karl E. Conney, Allan H.; Kappas, Attallah. New York, Nutrition Foundation. Abstract: A summary is presented of recent human in vivo studies of drug oxidations medicated by cytochrome P-450 in the liver and/or intestine. Implications of these studies, relative to the metabolism of endogenous and foreign chemicals, are discussed. Aspects particularly considered include: the effects of protein, carbohydrate, and lipid on drug metabolism; the influence of vegetables, containing a variety of natural chemicals, on drug metabolism; the effect of charcoal-broiled meats; the influence of fasting and nutrition; the effect of vitamin C deficiency; and the clinical significance of drug-nutrient interactions. It is concluded that the cytochrome P-450 dependent mixed function oxidase system oxidatively catalyzes a wide range of endogenous and exogenous (drugs, pollutants, carcinogens) substances. Activity changes of this metabolic system (e.g., by nutritional factors) may alter human response to such chemical exposures. N utritional factors identified that can alter drug and steroid hormone metabolism by the mixed oxidase system may have far-reaching implications for clinical therapeutics. (wz). Nutrition reviews. June 1982. V. 40 (6). p. 161-171. ill. 88 ref. (NAL Call No.: 389.8 N953).

#### 1505

Physiological ligands for copper and zinc (Food science and human nutrition).
DiSilvestro, R.A. Cousins, R.J. Palo Alto:
Annual Reviews. Annual review of nutrition.
1983. Literature review. v. 3. p. 261-288.
Includes references. (NAL Call No.:
QP141.A1A63).

#### 1506

Physiology of the control of food intake. Kissileff, H.R. Van Itallie, T.B. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 371-418. ill. Includes references. (NAL Call No.: QP141.A1A63).

#### 1507

Protein-energy interrelationships. Kinney, John M. Elwyn, David H. New York : A.R. Liss, 1981. Abstract: Various facts of protein-energy (nitrogen-calorie) interrelationships are reviewed. These include: methodology; metabolic body size; nitrogen balance (NB) versus nitrogen and caloric intake; NB versus energy balance; hypercatabolic patients; carbohydrate versus fat intake; and physiologic response of hospitalized patients to parenteral nutrition. Estimates of energy and nitrogen requirements must each be adjusted for variations in body size, a concept which applies to both energy expenditure and nitrogen excretion. Further, at each fixed inadequate protein intake there appears to be an individual limiting energy level, beyond which, increasing caloric intake without protein or protein without calories is without benefits. Relating nitrogen and energy balances, it is felt that restoration of protein tissue should be accomplished with the planned addition of the amount of body fat appearing appropriate for the particular patient. Data are shown that suggest that future nutritional approaches to treating hospitalized patients will require a new understanding of the influence of energy and nitrogen intakes on the functional loads placed on respective body organs. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 179-188. ill. Includes 25 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1508

A Rational diet for the elderly. Korhs, Mary Bess. AJCNA. Bethesda : American Society for Clinical Nutrition. Abstract: Studies on physiologic and pathologic processes and on sociologic factors related to a diet acceptable to the elderly are reviewed. Included in this assessment are the relationships and influences of obesity, nutrients (total fat, saturated fat, and cholesterol; trace minerals; iron; protein; carbohydrate; fiber; and sodium), and alcoholic beverages. The elderly can benefit by selecting a nutritionally-adequate diet by consuming the recommended servings of the basic 4 food groups. The minimum amounts of these servings will provide about 1200 kcal (the lower limit of the energy range for women). To insure that all known (and unknown) nutrients are included, the elderly should consume a wide variety of foods in each major food group, and reduce consumtion of foods (having a high concentration of alcohol, sugars, fats, oils) which provide calories and few other essential nutrients. Physical activity, which contributes to energy balance and a sense of well being, should be a part of the elderly nutrition regime. (wz). American journal of clinical nutrition. Oct 1982. Literature review. v. 36 (4, Suppl.). p. 796-802. ill. Includes 30 references. (NAL Call No.: 389.8 J824).

#### 1509

Regulation of water intake (Thirst, osmotic regulation).

Andersson, B. Leksell, L.G.; Rundgren, M. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Review article. v. 2. p. 73-89. ill. Includes references. (NAL Call No.: QP141.A1A63).

#### 1510

Relevance of hepatic mitochondrial activity to hepatic lipogenesis in genetically different strains of rats.

Berdanier, C.D. Thomson, A.R.; Bouillon, D.; Wander, R. New York: M. Dekker, c1982.
Metabolic effects of utilizable dietary carbohydrates / edited by Sheldon Reiser.
Literature review. p. 71-117. ill. 129 ref.
(NAL Call No.: RC627.R43M47).

#### 1511

#### Satiety.

Kissileff, Harry R.CONUD. Minneapolis: General Mills. Abstract: Satiation involves a sequence of physiological processes involving a variety of signals and loci which ultimately converge on the brain to bring about satiety and completion of a meal. The characteristics and methods for measuring satiety are discussed in addressing the mechanism of satiation. Specific factors that signal satiety, include: gastrointestinal distension; nutrient type and quantity; osmotic action; the length of time between eating occurances and the length of the meal: hormonal and neurotransmitter agents: and attitude toward type and flavor of food consumed. Both the stomach and the intestine have been shown as sources of satiety signals, possibly transmitted to the brain by the vagus nerve; the liver is another possible signal source. Further study is needed to determine how these sites combine to effect satiety. (wz). Contemporary nutrition. Jan 1983. Literature review. v. 8 (1). p. 1-2. Includes 42 references. (NAL Call No.: TX341.C62 F&N).

#### 1512

Stable isotope methods for nutritional investigation.

Matthews, D.E. Bier, D.M. Palo Alto: Annual Reviews. Annual review of nutrition. 1983. Literature review. v. 3. p. 309-339. ill. Includes references. (NAL Call No.: QP141.A1A63).

#### 1513

Thiamin in the elderly -- relation to alcoholism and to neurological degerative disease.

Iber, Frank L.AJCNA. Blass, John P.; Brin, Myron.; Leevy, Carroll M. Bethesda : American Society for Clinical Nutrition. Extract: Status of thiamin in the elderly North American population is reviewed. Most Americans eat sufficient thiamin, but about 5% of those over age 60 show impaired thiamin status. This is more marked in the poor, those confined in institutions, or those with illness. Thiamin-reponsive heart disease and Wernicke Korsakoff CNS syndromes occur in the elderly, but there is no increased prevalence. Minor heart or neurological syndromes related to thiamin deficiency cannot be identified. The RDA of thiamin provides at least 50% excess thiamin for those over 60 years old; an amount which is deemed adequate. There is no known toxicity for thiamin. (author). American journal of clinical nutrition. Nov 1982. Literature review. v. 36 (5 suppl.). p. 1067-1082. charts. Includes 128 references. (NAL Call No.: 389.8 J824).

#### 1514

Toxicant metabolism and the role of nutrients (Toxic substances, detoxification, diet). Bidlack, W.R. Chicago: Institute of Food Technologists. Food technology. Oct 1982. Review of the literature. v. 36 (10). p. 106-113. ill. 3 p. ref. (NAL Call No.: 389.8 F7398).

#### 1515

Trace elements in human nutrition. Rosemont, Ill., National Dairy Council. Abstract: Trace elements (which generally function as cofactors for enzyme catalysis) play a role in human health and nutrition. Fourteen trace elements have been established as essential nutrients; for 3 of these (iron, zinc, iodine) Recommended Dietary Allowances have been established; estimated safe and adequate daily dietary intake ranges have been determined for 6 others (chromium, copper, fluoride, manganese, molybdenum, selenium). Within the specified range for each trace element, optimal tissue concentrations and functions are maintained through homeostatic mechanisms. Intakes above and below the given range can result in toxicity and deficiency, respectively. Notable human deficiencies have been reported for iron, zinc, and iodine, while less dramatic deficiencies have been noted for chromium, copper, and selenium. While difficult to assess (due to lack of sensitive diagnostic tests), marginal trace element deficiencies and toxicities are of particular concern in the US. The reliable determination of dietary intake adequacy is complicated by numerous interactions among trace elements and with other dietary components, and by variations in their bioavailability in different foods. A nutritionally-balanced diet for major nutrients

is relied upon to provide an adequate and safe intake level of all trace elements. (wz). Dairy Council digest. Jan/Feb 1982. Literature review. v. 53 (1). p. 1-6. charts. Includes 80 references. (NAL Call No.: 389.8 D14).

#### 1516

Trace mineral nutrition in the elderly. Nordstrom, James W.AJCNA. Bethesda : American Society for Clinical Nutrition. Abstract: The potential for trace element malnutrition in the elderly appears to be considerable, but few studies have focuses on trace mineral nutrition in the elderly. Research findings on 5 trace elements (iron, zinc, copper, chromium, fluoride) are individually examined. Two large nutrition surveys concerning anemia and iron status of black, white, and Spanish American adults over the age of 59 showed lower mean iron intakes for blacks, suggesting that diet accounts partly for hemoglobin differences observed between the races. While decreased iron absorption was reported in old age, another study reported no difference in ferrous sulfate absorption between healthy young adults and active elderly persons. However, elderly persons used the absorbed iron less effectively. Adult zinc deficiency appears associated with certain diseases, severe tissue injury, or marginal intake, but zinc hair levels in persons over 65 are greater than for younger age groups. Copper deficieny has not been a significant problem for the elderly, while chromium deficiency and its impact on health remains to be established. The role of fluoride in decreasing dental caries and osteoporosis is discussed. (wz). American journal of clinical nutrition. Oct 1982. Literature review. v. 36 (4, Suppl.). p. 788-795. charts. Includes 81 references. (NAL Call No.: 389.8 J824).

#### 1517

Vitamin D and bone health in the elderly. Parfitt, A. Michael.AJCNA. Gallagher, J.C.; Heaney, Robert P.; Johnston, C.C.; Neer, Robert.; Whedon, G. Donald. Bethesda: American Society for Clinical Nutrition. Abstract: A comprehensive review is presented concerning the interrelationships of vitamin D (VtD) nutriture with bone health in the elderly. Specific attention is given to the chemisty and physiology of VtD; endogenous and exogenous sources and supply of this vitamin; hypovitaminosis D; VtD deficiency and its health implications in the elderly; VtD requirements for the elderly; and potential toxic effects associated with high VtD intakes. The status of VtD nutrition depends on synthesis in the skin under sunlight, as well as on dietary VtD intake. Elderly in European countries not using VtD-fortified milk who have reduced sun exposure suffer a fall in VtD body stores with age, leading to a high frequency of hypovitaminosis D in the sick elderly. While the situation in the US appears far superior to this, VtD body stores probably fall with age in the US as they do in Europe. The VtD

requirement increases with age, with a total supply of 15-20 micrograms/day (600-800 IU) from all sources being recommended. Special attention should be given to elderly who are housebound, having malabsorption problems, or having interruption of enterohepatic circulation. (wz). American journal of clinical nutrition. Nov 1982. Literature review. v. 36 (5 suppl.). p. 1014-1031. Includes 174 references. (NAL Call No.: 389.8 J824).

#### 1518

Vitamin E: biochemical, hematological, and clinical aspects / edited by Bertram Lubin and Lawrence J. Machlin.

Lubin, Bertram,; 1939-; Machlin, Lawrence J.,; 1927. New York New York Academy of Sciences 1982. Abstract: Sixty papers on vitamin E present current information on the biochemisty, physiology, and role of this vitamin in human disease for vitaminologists and nutrition researchers. A review of several potential clinical applications is included, with particular reference to premature infants, children having intestinal malabsorption, and patients with hereditary hematologic disease. An extensive review of the biochemical and physiologic effects of vitamin E in normal and abnormal blood cells also is included, as well as a broad spectrum of research directions currently being pursued concerning the antioxidant and biochemical modulation capacities of vitamin E. Advances in free radical technology are described. Special attention also is given to vitamin E deficiency and anemia, and vitamin E protection against drugs and air pollutants. (wz). Proceedings of a conference by the New York Academy of Sciences held November 11-13, 1981. xi, 506 p. : ill.; 23 cm. -. Includes bibliographical references and index. (NAL Call No.: QP772.T6V52 F&N B-3447).

#### 1519

Zinc and copper in human nutrition. Solomons, Noel W. New York : A.R. Liss, 1981. Abstract: Various factors involved in the nutriture of zinc and copper are reviewed for each of these 2 trace elements. These include: metabolism and homeostasis, absorption, distribution, excretion, biochemical and physiologic function, interactions with other nutrients, clinical signs of deficiency, primary and secondary deficiencies, nutriture assessment, dietary and ecologic considerations, bioavailability, and therapeutic and toxicologic considerations for oral and parenteral administration of the trace element. While much knowledge has been gained concerning these 2 trace elements, much still remains to be discovered. Attention to these nutrients in medical, surgical, and dietary management is essential to the care of hospitalized patients, since a variety of iatrongenic and pathologic factors predispose to secondary deficiencies of these minerals. Less is known of the biology of these minerals in normal human nutrition in infancy and in old age. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 97-127. ill., charts. Includes 97 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

tissue can be responsible for retinal dysfunction in nightblind sickle cell anemia patients. (wz). Nutrition reviews. June 1982. v. 40 (6). p. 175-177. 15 ref. (NAL Call No.: 389.8 N953).

#### 1520

Zinc nutriture in the elderly in relation to taste acuity, immune response, and wound healing.

Sandstead, Harold H.AJCNA. Henriksen, Louise K.; Greger, Janet L.; Prasad, Ananda S.; Good, Robert A. Bethesda : American Society for Clinical Nutrition. Abstract: A comprehensive review is presented concerning the role of zinc (Zn) nutrition in taste acuity, immunity and wound recovery in the elderly. Specific attention is given to Zn in foods, Zn bioavailability, evidence of Zn deficiency, and the need for Zn in immune function. It was concluded that the mean daily In intake in groups of US elderly ranges from 7-13 mg. Dietary Zn intake appears to be related to energy intake. An apparently adequate In intake can be achieved for \$1.50-2.00/day with careful food selection; hence, people spending below \$1.50/day for food have limited ability to satisfy dietary In requirements. Further In bioavailability should be considered in the food selection process. Evidence suggests that some elderly individuals have a deficient Zn nutriture, but available data are insufficient to ascertain the frequency of this deficiency. Most instances of hypogensia in the elderly, however, are unrelated to In nutriture. Deficient Zn nutriture seems to contribute to poor healing in the elderly, but, again, the data are too few to ascertain frequency. Self-treatment with In greater than the RDA may be unwise. (wz). American journal of clinical nutrition. Nov 1982. Literature review. v. 36 (5 suppl.). p. 1046-1059. charts. Includes 115 references. (NAL Call No.: 389.8 J824).

#### 1521

Zinc-responsive nightblindness in sickle cell anemia.

New York, Nutrition Foundation. Abstract: Abnormalities of zinc (Zn) metabolism have been identified in homozygous subjects with sickle cell anemia. Recent study of experimental Zn deficiency in animals showed a reduction in retinol dehydrogenase, a potential Zn-metalloenzyme which indirectly assists rhodopsin formation, the visual pigment of rods in the retina. Other recent studies demonstrated that certain nightblind patients wiith alcoholic cirrhosis and Zn deficiency improved their in-dark adptation in response to oral Zn supplementation. A further study evaluated dark adaptation in a group of sickle cell disease patients. The neutrophil Zn content (but not plasma Zn) was significantly lower for patients with impaired dark adaptation. Longitudinal follow-up patients supplemented with In acetate daily improved their in-dark adaptability. Indications are that In deficiency at the level of retinal

## DIET AND DIET RELATED DISEASES

#### 1522

Allium sativum (garlic) and atherosclerosis: a review.

Lau, B.H.S.NURHA. Adetumbi, M.A.; Sanchez, A. New York: Pergamon Press. Nutrition research. Jan/Feb 1983. Literature review. v. 3 (1). p. 119-128. Includes references. (NAL Call No.: OP141.A1N88).

#### 1523

Amino acid imbalance and hepatic encephalopathy (Nutrition).

Bernardini, P. Fischer, J.E. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 419-454. Includes references. (NAL Call No.: QP141.A1A63).

#### 1524

Analytical methods for nitrosamines -- an overview.

Fine, D.H.BANRD. Cold Spring Harbor: Cold Spring Harbor Laboratory. Banbury report. 1982. Literature review. v.. 12. p. 165-174. Includes references. (NAL Call No.: 0H426.B35).

#### 1525

Behavioral treatment approaches to obesity: Successes with the nonretarded and retarded. Rotatori, Anthony F. Switzky, Harvey.; Fox, Robert. New York, Human Sciences Press. Abstract: Literature concerned with the treatment of obese non-retarded individuals is reviewed and the successful application of the treatment to retarded obese individuals is summarized. Weekly weight loss studies with the mentally retarded compared favorably to those with the non-retarded during the active treatment period; other studies reported that the mentally retarded continued weight losses 10-52 weeks thereafter. Weight reduction programs could be improved in a number of ways, including pre-treatment and post-treatment data taking and evaluation, and the establishment of individual ideal goal weights for each subject at the beginning of the treatment period. Research implications assessed included: psychosomatic complaints by the mentally retarded during a weight treatment program; the substantial variability in weight loss patterns for individuals; and evaluation of eating pattern changes during treatment. (wz). Obesity and metabolism. Fall 1981. v. i (3). p. 140-158. charts. 46 ref. (NAL Call No.: RC628.A1D22 F&N).

#### 1526

Bioavailability of trace mineral elements (Dietary).

Forbes, R.M. Erdman, J.W. Jr. Palo Alto: Annual Reviews. Annual review of nutrition. 1983. Literature review. v. 3. p. 213-231. Includes references. (NAL Call No.: QP141.A1A63).

#### 1527

Bulimia in the adolescent.

Herzog, David B.AJDCA. Chicago : American Medical Association. Abstract: Bulimia is increasing in adolescents (but very little is reported in the literature. The frequently chronic course and associated physical consequences necessitate early intervention. Clinical and demographic data from 8 bulimic adolescents (outpatients) are reported. Four tables list diagnostic criteria for bulimia; family history (research diagnostic); anorexia nervosa; and depression. These bulimic adolescents were of average weight or slightly overweight for their height; all had dieted in the past with minimal success. The use of laxatives or vomiting as a means of weight control was recommended by friends of family members. Psychological consequences varied. Preoccupation with food and binge eating patterns interferred with relationships, activities, and sometimes school performance. Depression was a common complaint. Bulimia and anorexia nervosa are compared. (kbc). American journal of diseases of children. Nov 1982. v. 136 (11). p. 985-989. Charts. Includes 22 references. (NAL Call No.: 448.8 AM38).

#### 1528

Cardiovascular research: Decades of progress, a decade of promise.

Levy, Robert I.SCIEA. Moskowitz, Jay. Washington: American Association for the Advancement of Science. Abstract: Advances in cardiovascular research are reviewed. Cardiovascular disease is the major cause of all deaths (51.2%) in the US, but mortality has decreased more than 30% in the last 30 years with 60% of this decline recorded between 1970 and 1980. While there have been significant research achievements, research must continue in the areas of etiology and pathogenesis, validating potentially beneficial research hypotheses, along with the translation and dissemination of research results to health professionals. Atherosclerosis, or 1ts cardiovascular sequelae processes can be controlled and treated if understood, and prevention initiated. (kbc). Science. July 9, 1982. v. 217 (4555). p. 121-129. 111. 68 ref. (NAL Call No.: 470 SCI2).

#### 1529

Cellular immune changes in undernourished children.

McMurray, David N. New York : A.R. Liss, 1981. Abstract: A study was conducted involving 2 groups of children: Group A, 72 children (37 females, 35 males) from a low socioeconomic urban area followed through their first 2 years of life; and Group B, 43 severely malnourished children (22 females, 21 meals) hospitalized and fed a high-protein, high-calorie diet for 4-5 weeks, followed by an at-home ii month follow-up period. The study also included tests on experimental animals (specific pathogen-free albino guinea pigs) fed isocaloric diets of different carien protein levels. All children and animals were vaccinated with BCG vaccine. Over half the Group A children were partly malnourished by i year of age, although the proportion of severely undderweight children was low and constant. In Group B children, the effect of hospitalization and treatment was most noticeable in the marked increase in serum total proteins and albumin (especially in kwashiorkor children). For BCG response in protein-deficient test animals, the magnitude of skin reaction was notably reduced in low-protein intake animals. Hence, there is little doubt that severe malnutrition has a pronounced effect on disease resistance. mediated largely by immune function impairment. Other facets of this study are discussed. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 305-318. ill., charts. Includes 17 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1530

Changes in antibodies and disease resistance in malnourished animals and children.

Watson, Ronald Ross. New York : A.R. Liss, 1981. Abstract: Aspects of humoral antibody levels (and their synthesis) in undernourished children, the role of complementary proteins in antibody-mediated host defenses, and the interrelation of immunity (provided by secretions of mucosal surfaces in children) and nutritional stress are reviewed. While the effects of high nutrition levels on immunity would be of great interest, most studies have focused on common nutritional deficiency diseases. The major, non-cellular immune systems that might be involved are: humoral antibodies (or antibodies and complement-enhanced phagocytosis) inside the tissues; and secretory immunity of external mucosal surfaces bathed in secretions. While most internal humoral antibody studies have dealt with protein and energy deficiencies in young test animals or humans, several studies have been carried out with high-vitamin, low-mineral (or low essential fatty acid) diets (e.g., high vitamin E appears to increase antibody production). The complement proteins, on the other hand, form a family of enzymes that perform in a complex set of host-defense mechanisms. The effects of nutritional stress (e.g., low-protein diets) on secretory immunoglobulin A (IgA) in diseased children are discussed. (wz). Nutrition in the 1980's--the

constraints on our knowledge. Literature review. p. 295-304. ill. Includes i4 references. (NAL Call No.: QPi41.A1W4 1980 F&N B3160).

#### 1531

Clinical consequences of low selenium intake and its relationship to vitamin E.

Levander, O.A.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences.

1982. Literature review. v. 393. p. 70-82. 64 ref. (NAL Call No.: 500 N484).

#### 1532

Coronary heart disease--an epidemic related to diet.

Harper, A.E.AUCNA. Bethesda : American Society for Clinical Nutrition. Abstract: Various aspects of the possible associations of coronary heart disease (HD) to diet are reviewed and discussed. Evidence used for . postulating that the US has been experiencing an epidemic in HD has not been critically evaluated relative to the diet-HD hypothesis. Examination is made of the reliability of the apparent decline in HD death rate since 1968. It may not be possible to establish a pattern of change in risk factors that would account for this decline from the elevated peak HD death rate in 1968. New and imaginative approaches conducted without a preconceived bias will be necessary to critically assess (rather than prove) this hypothesis. A variety of research findings are revieweed in this context. (wz). American journal of clinical nutrition. April 1983. Literature review. v. 37 (4). p. 669-681. ill., charts. Includes 52 references. (NAL Call No.: 389.8 J824).

#### 1533

Development of lipid metabolism (Obesity and adipose tissue).

Hahn, P. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 91-111. Includes references. (NAL Call No.: QP141.A1A63).

#### 1534

Diet and atherosclerosis: Recommendations of a pediatrician.

Roy, Claude C. New York: A.R. Liss, 1981.
Abstract: Atherosclerosis (AS) is the leading cause of death in Canada, but it cannot be ascribed to a single underlying factor.
Overlapping major (hypercholesterolemia, hypertension, smoking) and minor (obesity, abnormal glucose tolerance test, physical inactivity, phychosocial tensions) risk factors in the same individuals, nonetheless, increase the probability of coronary artery disease (CAD). The role of pediatricians in preventing AS (or in altering its progression) extends far

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beyond the formulation of dietary recommendations. The concept of AS initiation by the appearance of fatty streak in the aortas of almost all children by age 10 (regardless of diet and CAD incidence) remains controversial. The complex diet-heart disease relationship has been studied through animal experiments and human epidemiology, but there are no simple connections between dietary cholesterol and saturated fat, serum lipids, and advanced AS. The important question is whether dietary recommendations should be made for all children or only for those identified as being at high risk. A set of 8 recommendations based on identified premises are presented as guidelines. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 391-396. charts. Includes 27 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160)

#### 1535

#### Diet and bone health.

Rosemont, Ill., National Dairy Council. Abstract: Dietary factors (nutrient-nutrient interactions between calcium (Ca) and vitamin D, protein, lactose, and fiber) and the daily requirement for Ca relative to bone health are reviewed. Age-related osteoporosis (OP; representing skeletal bone loss) resulting in fractures, while poorly understood, is the most common metabolic bone disease. Postmenopausal women and the elderly are at greatest risk for OP. This disease is probably heterogeneous in etiology, involving racial, genetic, hormonal and physical, as well as nutritional factors. Over 75% of US women over age 35 have a daily Ca intake below the Recommended Daily Allowance (RDA) of 800 mg. Effective Ca intake depends on both on dietary Ca intake and CA bioavailability, which is influenced by absorption efficiency and by drug-nutrient and nutrient-nutrient interactions. While most people can adapt to dietary Ca reductions by increasing the efficiency of intestinal Ca absorption, the adaptability varies between individuals. Excess protein and fiber intake appear to increase the Ca requirement, while phosphorus intake does not. A RDA for Ca in excess of 800 mg may be necessary to achieve optimal bone health. (wz). Dairy Council digest. Sept/Oct 1982. Literature review. v. 53 (5). p. 25-30. Includes 53 references. (NAL Call No.: 389.8 D14).

#### 1536

# Diet and juvenile delinquency. Gray, Gregory E.NTDYA. Gray, Lorraine K. Annapolis: Nutrition Today, Inc. Abstract: Food choices may be responsible for antisocial behavior in young people, but scientific research does not support the theory. However, some recent books and reviews suggest that an association does exist between diet and juvenile delinquency. Hypoglycemia, food additives, food allergies, and nutritional deficiencies may be the problems. Official criminologists haven't accepted the nutritional

and biochemical theories of criminal behavior, but the proponents of these theories have had impact on prisons, probation departments, and school systems. The testimony regarding effected changes are mostly anecdoted. Some proposed treatments, such as vitamin therapy pose a greater risk in themselves. (kbc). Nutrition today. May/June 1983. Literature review. v. 18 (3). p. 14-17, 20-22. ill. Includes 77 references. (NAL Call No.: RA784.N8).

#### 1537

Diet and migraine: a review of the literature. Perkin, J.E.JADAA. Hartz, J. Chicago: The Association. Journal of the American Dietetic Association. Oct 1983. Literature review. v. 83 (4). p. 459-463. Includes references. (NAL Call No.: 389.8 AM34).

#### 1538

Dietary restriction and its effects on immunity and aging.

Weindruch, Richard H. Makinodan, Takashi. New York: A.R. Liss, 1981. Abstract: Results of animal studies using experimental protocols to influence the aging process are discussed, covering both weaning- and adult-initiated food restrictions. In contrast to weaning-initiated food restriction, underfeeding started in adulthood has received much less attention regarding lifespan-disease-immunosenescent effects. The present findings suggest that adult-onset underfeeding may positively influence these processes. The model of dietary restriction discussed is biogerontologically important for several reasons: weaning-initiated food restriction appears to be the best tool to interfere with aging in mammals (in order to allow for assessment of resulting alterations); underfeeding seems to be a potent means of chronic disease prevention; and lifespan extension in test animals by means of food restriction appears promising. For human applications, only the adult-onset approach seems currently relevant. Strategies, however, should be safely tested for their effects on lifespan duration and life quality with increasing age. (wz). Nutrition in the 1980's -- the constraints on our knowledge. Literature review. p. 319-325. ill., charts. Includes 34 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1539

Effects of diet on blood clotting and platelet aggregation.

Renaud, S. Dumont, E.; Godsey, F.; McGregor, L.; Morazain, R. New York: A.R. Liss, 1981. Abstract: It appears that the study of platelet functions, relative to environmental factors associated with coronary heart disease (CHD), might be at least as relevant as the study of blood lipids in explaining CHD pathogenesis. Data from animal and human studies are

reviewed. Such studies indicate that certain platelet functions (clotting activity and response to thrombin aggregation) are affected more markedly than serum lipids by the environmental factor most closely associated with CHD, i.e., saturated fat (SF) intake. Polyunsaturated fatty acids inversely related to the platelet functions are linolenic acids and those inversely related to serum cholesterol are linoleic acids. Calcium and alcohol intakes appear to partially inhibit the effect of SF on platelet functions, while not being consistently associated with blood lipid lowering; hence, platelets might be involved in the known protective effect of these intakes on CHD. Platelets may be the principal blood mediator between diet and CHD. (wlz). Nutrition in the 1980's -- the constraints on our knowledge. Literature review. p. 361-381. ill., charts. Includes 26 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1540

The Effects of hyperalimentation on immune function and tumor growth.

Rickard, Karyl A. Baehner, Robert L.; Provisor, Arthur J.; Weetman, Robert M.; Grosfeld, Jay L. New York: A.R. Liss, 1981. Abstract: The effects of nutritional support, especially intravenous hyperalimentation (HA) on protein energy malnutrition (PEM) reversal are reviewed, covering the current limited data on the associated changes of immune function and tumor growth. While a number of nutrients may influence immune function and tumor growth, the focus is on the effect of protein and energy. PEM often accompanies intense multi-modal cancer treatment in the case of patients with advanced neoplasms. In cancer patients, malnutrition increases morbidity and mortality incidence, reduces the patient's ability to withstand full, aggressive therapy, and increases his susceptibility to infection. Prevention or reversal of PEM may reduce these risks and enhance patient survival. Most data on the role of HA in reversing malnutrition and restoring immune competence in cancer patients are derived from studies of adults. HA effectively repletes most malnourished adults with advanced cancer. (wz). Nutrition in the 1980's -- the constraints on our knowledge. Literature review. p. 339-347. charts. Includes 26 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

#### 1541

Effects of phosphorus-containing compounds on iron and zinc utilization; a review of the literature (Diet, humans, turkey poults). Greger, J.L.ACSMC. Washington, D.C.: The Society. ACS Symposium series - American Chemical Society. 1982. 1982. (203). p. 107-120. 68 ref. (NAL Call No.: QD1.A45).

#### 1542

The effects of vitamin E on arachidonic acid metabolism (Alpha tocopherol).

Panganamala, R.V.ANYAA. Cornwell, D.G. New York: The Academy. Annals of the New York Academy of Sciences. 1982. Literature review. v. 393. p. 376-391. ill. 78 ref. (NAL Call No.: 500 N484).

#### 1543

Elemental diets / editor, Robin I. Russell. Russell, Robin I. Boca Raton, Fla. CRC Press c1981. Abstract: A review of research on elemental diets discusses their use as a nutritional support method. Information is presented in 4 general areas. The first section covers the normal nutritional state (digestion and absorption), causes and results of nutritional insufficiency, assessment of nutritional status, and methods of providing nutritional supports. A second section discusses the metabolic effects of elemental diets on various aspects of GI tract functions. The third section details clinical uses of elemental diets in a variety of diseases (bowel disease, cancer, burns, pediatrics, and others); problems and hazards of the use of elemental diets are discussed. Finally, clinical uses of elemental diets are summarized and assessed. (rkm). 261 p. : ill. ; 26 cm. Includes bibliographical references and index. (NAL Call No.: RM229.E39 F&N B-3261).

#### 1544

The endocrine responses to protein calorie malnutrition.

Becker, D.J. Palo Alto: Annual Reviews. Annual review of nutrition. 1983. Literature review. v. 3. p. 187-212. Includes references. (NAL Call No.: QP141.A1A63).

#### 1545

Extrinsic tagging in iron bioavailability research: a critical review (Iron absorption). Consaul, J.R.JAFCA. Lee, K. Washington: American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1983. v. 31 (4). p. 684-689. Includes references. (NAL Call No.: 381 J8223).

#### 1546

Food protein sources: Implications for nutrient requirements.

Young, Vernon R. New York: A.R. Liss, 1981. Abstract: Fundamental consideration is given to the food composition of different protein foods, and the implications of chemical compositional differences of food proteins for satisfying consumer nutrient requirements and nutritional well-being are discussed. Examples are used to emphasize the complexity of the

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interrelationships between food proteins and the utilizations of (and requirements for) nutrients. Based upon this review, it is evident that, while considerations of different food proteins relative to amino acid and nitrogen requirements represent an important basis for evaluating the role of food protein sources in human nutrition and health, such considerations represent only an initial basis for such evaluations. Different food protein sources influence the utilization and requirements for a number of nutrients in various ways. Nutrient interations that might modify human nutrient requirements also are considered. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 189-206. ill., charts. Includes 52 references. (NAL Call No.: QP141.A1W4 1980 F&N

#### 1547

Free radical biology: xenobiotics, cancer, and aging (Role of vitamin E, alpha tocopherol).

Pryor, W.A.ANYAA. New York: The Academy.

Annals of the New York Academy of Sciences.

1982. Literature review. v. 393. p. 1-22. ill.

102 ref. (NAL Call No.: 500 N484).

#### 1548

Health hazards of obesity and weight control in children; A review of the literature. Mallick, M. Joan. Washington: American Public Health Association. Extract: A review of literature on the health hazards of obesity and weight control in children indicates: 1) methodological flaws tend to invalidate the assumption that obesity is a risk factor for this age group; 2) weight control by children and adolescents may cause a variety of health problems including retardation of growth, development, mental functioning, and reproductive capacity; and 3) preoccupation with weight control in this society makes it likely that weight control-related health problems are common phenomena. Further research into the short and long-term consequences of obesity and weight control is necessary before enlightened clinical practice in this area is possible. (author). American journal of public health. Jan 1983. Literature review. v. 73 (1). p. 78-82. Includes 50 references. (NAL Call No.: 449.9 AM3J).

#### 1549

Health maintenance through food and nutrition : a guide to information sources / Helen D. Ullrich.

Ullrich, Helen D. Detroit, Mich. Gale Research Co. c1981. Abstract: An annotated bibliography for nonprofessionals and professionals identifies sources which will provide scientific information about food and nutrition; journal articles, books, pamphlets, leaflets, reports, and teaching aids are listed for each subject. The first of 3 parts covers

different aspects of motivation; basic information; nutrients and functions; growth and development; applied conditions (obesity, athletics, dental health, vegetarianism); and clinical nutrition (diet therapy, alcoholism, cancer, diabetes, etc.). A second part covers food as it relates to health. Topics include: general foods; fabricated foods; food composition; world food supply; food preservation and storage; and additives, adulterants, and contaminants. Finally, part 3 deals with individuals and groups: consumers (education, regulations, programs, advertising, surveys); professional and paraprofessional training; government regulations and food programs; bibliographies and information resources. (rkm). Includes indexes. xx, 305 p. ; 23 cm. -. (NAL Call No.: Z6663.N9U44 F&N B-3249).

#### 1550

Human diet and nutrition / compiled by Kay Rodgers.

Rodgers, Kay. Washington, D.C. Science Reference Section, Science and Technology Division, Library of Congress 1981. Caption title ~"March 1982.". 18 p.; 28 cm. -. (NAL Call No.: Z6663.N9R64).

#### 1551

The hyperkinetic child: an annotated bibliography, 1974-1979 / (compiled by) Carol Ann Winchell.

Winchell, Carol Ann. Westport, Conn. Greenwood Press 1981. Abstract: An annotated bibliography covering nearly 350 popular and professional journals and other media (published between 1974-79) attempts to incorporate diverse fields of knowledge related to the hyperkinetic child. These include: medicine, education, psychology, child development, nursing, sociology, social work, rehabilitation, and law. Specific aspects of hyperactivity are covered, including etiology, diagnosis, and management of the disorder. Unannotated references are included for works published in 1980. References are grouped by subject; there are 6 appendices (nomenclature, drug table, glossary, audiovisuals, organizations, and bibliographic sources) and author and keyword indices. xxxiv, 451 p.; 25 cm. -. Includes bibliographical references and indexes. (NAL Call No.: Z5814.C52W53 F&N B-3294).

#### 1552

Tatrogenic nutritional deficiencies.
Young, R.C. Blass, J.P. Palo Alto: Annual
Reviews. Annual review of nutrition. 1982.
Literature review. v. 2. p. 201-227. Includes
references. (NAL Call No.: OP141.A1A63).

Inappropriate priorities.

Olson, Robert E. New York : A.R. Liss, 1981. Abstract: Numerous obstacles inhibit the success of nutrition intervention programs, one of which is the establishment of inappropriate priorities. Examples illustrate some of the problems in the areas of nutrition intervention trials, protein-calorie malnutrition, obesity, and coronary heart disease, based on a review of the literature. Failure to recognize the multi-factorial nature of disease and of all ecological relationships that are inherent, represents a serious obstacle that has led to misplaced priorities. In the future, nutritional interventions must be based on sound nutritional science in view of holistic medicine and public health. It is important that positive intervention trials precede public health education in order to minimize the establishment and the use of inappropriate priorities. Further, nutrition scientists should not support politically-motivated public health action programs for which health risks and benefits are unknown. (wz). Nutrition in the i980's--the constraints on our knowledge. p. 523-537. ill., charts. Includes 35 references. (NAL Call No.: QP141.AiW4 1980 F&N B3160).

# 1554

Interactions of immune function with lipids and atherosclerosis.

Klurfeld, D.M.CRTXB. Boca Raton: CRC Press. CRC critical reviews in toxicology. 1983. Literature review. v. 11 (4). p. 333-365. ill. Includes references. (NAL Call No.: RA12ii.AiC7).

# 1555

Iron status of elderly Americans.

Lynch, Sean R.AJCNA. Finch, Clement A.; Monsen, Elaine R.; Cook, James D. Bethesda : American Society for Clinical Nutrition. Extract: Studies of iron nutriture in the elderly are limited, and very few include observations on individuals over age 75. The 2 Health and Nutrition Examination Surveys (HANES) carried out by the US Dept. of Health, Education and Welfare demonstrate that the mean iron intake of Americans is adequate until age 75. However, with changes in the major food sources, there is a decrease in iron derived from meat and a concomitant rise in the the proportion supplied by breakfast cereals. Alterations in dietary iron bioavailability that may result from this have not been studied. Physiological data suggest that the elderly do not represent a target population for iron deficiency since iron requirements are no greater than those of adult men (and lower than those of children and menstruating women). There is little direct evidence of a high prevalence of iron deficiency in the elderly; however, laboratory measurements that have proved useful in defining iron status in younger people have not been standardized for (or extensively used in)

older people. Anemia is still the most important known consequence of signifiant iron deficiency. However, the application of Hb (or Hematocrit) standards used in younger people to the elderly (and the assumption that anemia can be equated with iron deficiency) invalidates the conclusions of many surveys. Hb and hematocrit measurements are not suitable screening tests for iron deficiency in the elderly, and there is an urgent need for a clearer understanding of the physiological and nutritional factors responsible for lower Hb values in older people (particularly older blacks). (author). American journal of clinical nutrition. Nov 1982. Literature review. v. 36 (5 suppl.). p. i032-1045. ill., charts. Includes 100 references. (NAL Call No.: 389.8 J824).

### 1556

Is dietary B-carotene an anti-cancer agent. Wolf, George.NUREA. Washington, D.C. : Nutrition Foundation. Abstract: Beta-carotene has been proposed as an anti-cancer agent in man. Studies relating retinol levels inversely to cancer risk must be explained, however, and an anti-cancer effect of dietary carotene must be established by experiments and trials in both animals and man. So far retinoids have been shown to inhibit carcinogenesis in experimental animals and in cell culture systems. Epidemiologic studies found an inverse correlation between plasma retinol levels and cancer risk in human populations. A review of both experimental and epidemiological data is presented. Suggestions for future research include: determining if B-carotene is anti-carcinogenic; evaluating what stages it effects (e.g., initiation); understanding the metabolites' action at target tissues; determining if it acts to prevent peroxidation; and ascertaining factors controlling retinol and carotene plasma levels in different populations. (kbc). Nutrition reviews. Sept 1982. v. 40 (9). p. 257-261. Includes 21 references. (NAL Call No.: 389.8 N953).

# 1557

Low sodium diets, January 1979 - November 1982 / searched by J. MacLean.
McLean, Jayne T. Beltsville, Md. U.S. Dept. of Agriculture, National Agricultural Library 1983. "January 1983. ~Includes index. 70 p.; 28 cm. -. (NAL Call No.: aZ5071.N3 no.83-13).

# 1558

Metabolic adaptations to starvation, semistarvation, and carbohydrate restriction. Aoki, Thomas T. New York: A.R. Liss, 1981. Abstract: Factors related to human fasting are reviewed: normal fuel depots; metabolic changes during brief and prolonged fasts; the roles of glutamine and specific hormones during the fast; the muscle redox state and protein conservation; and metabolic effects of glucose

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needs on nitrogen metabolism. Human metabolic adaptation to starvation, semi-starvation, and carbohydrate restriction is complex, involving a number of hormones, substrates, and tissues. The need for the ketoacids, beta-hydroxybutric and acetoacetic, to replace glucose as the primary brain fuel for fasting humans appears to be the key to maximum protein conservation. Hence, ketogenesis is needed to provide the brain with a fat-derrived, water-soluble, insulin-independent, glucose-equivalent fuel. This adaptation is associated with a small urinary loss of the ketoacids (100-150 mM or 40-60 calories per day). The ketonuria induces increased renal use of muscle glutamine (derived by proteolysis); administering glucose to meet brain requirements causes ketogenesis suppression during fasting and a decrease in nitrogen mobilization and use. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 161-177. ill., charts. Includes 29 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

### 1559

Metabolic approaches to cancer cachexia.

Lawson, D.H. Richmond, A.; Nixon, D.W.; Rudman, D. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 277-301. Includes references. (NAL Call No.: QP141.A1A63).

# 1560

# Metabolic effects of total parenteral nutrition.

Greig, P.D. Baker, J.P.; Jeejeebhoy, K.N. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 179-199. Includes references. (NAL Call No.: QP141.A1A63).

# 1561

# Moderate amounts of alcoholic beverages and clinical nutrition.

McDonald, Janet. Oakland, Calif., Society for Nutrition Education. Abstract: Five clinical aspects of moderate alcohol intake are discussed through a review of the literature. The 5 aspects are: the effect of ethanol on nutrition absorption; alcohol use while on a low-sodium diet; alcohol consumption by diabetics; the relationship between alcohol use and heart disease; and alcohol consumption during old age and confinement. Discussion stresses the proper definition of moderate consumption and suggests ways to quantify it. (kbc). Journal of nutrition education. June 1982. v. 14 (2), p. 58-60. charts. 37 ref. (NAL Call No.: TX341.J6).

# 1562

Nutrition and immunity: the influence of diet on autoimmunity and the role of zinc in the immune response.

Hansen, M.A. Fernandes, G.; Good, R.A. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 151-177. Includes references. (NAL Call No.: QP141.A1A63).

### 1563

Obesity: Does it modulate infectious disease and immunity.

Edelman, Robert. New York: A.R. Liss, 1981. Abstract: The little known interaction of morbid obesity, hyperlipidemia, and dietary fats with infectious agents and immunocompetent cells (ICs) is reviewed and assessed. Studies specially considered include the interrelationships of lipids and infections in animals and humans, the influence of lipids in immune function, and the special case of obesity. Obesity, high-fat diets, and excess lipids interact with infectious agents and ICs in several ways; resistance to some infectious and autoimmune diseases are enhanced by high fat diets to inbred mice. It is known that the potential for surgical wound infections in obese humans is increased while tubercular death risk was decreased; in mice fed saturated fatty acids (coconut oil), conclusive data on the interaction of lipids and autoimmune disease, however, do not exist. Certain fatty acids (and cholesterol) are strong modulators of T-lymphocyte and phagocyte functions in test animals and in vitro leukocyte cultures. In humans, however, immune function modulation by dietary lipids remains uncertain. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 327-337. Includes 65 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

# 1564

Personal reflections on clinical investigations (Pellagra).

Bean, W.B. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Review article. v. 2. p. 1-20. Includes references. (NAL Call No.: QP141.A1A63).

# 1565

Perspectives in hypertension: including an overview of the problem, pertinent research, abstracts and commentary: a desk reference.

Camden, N.J. Consumer Nutrition Center,
Campbell Soup Company (1982). Abstract: A review of literature highlights recent research and theories concerning hypertension (the most prevalent health problem in the US). Areas discussed are: definitions; prevalence; risks; diagnosis; predisposing factors; current research directions (kidneys, adrenals, sodium, obesity, nervous system, treatment); and

recommendations. Abstracts and critiques of original research papers and review articles on hypertension include opposing viewpoints. Topics covered are: sodium and hypertension; obesity and hypertension; oral contraception, pregnancy and hypertenson; race and hypertension; drug therapy and treatment; treatment and management of hypertension; and calcium metabolism in hypertension. (rkm). Cover title. 28 p.; 22 cm. Bibliography: p. 25-28. (NAL Call No.: RC685.H8P45 F&N C-2414).

### 1566

The pharmacology and toxicology of caffeine. Lachance, M.P.JFSAD. Westport: Food & Nutrition Press. Journal of food safety. 1982. Literature review. v. 4 (2). p. 71-112. ill. 17 p. ref. (NAL Call No.: TP373.5.J62).

### 1567

Pica and nutrition (Pathological craving for normal food constituents).

Danford, D.E. Palo Alto: Annual Reviews.

Annual review of nutrition. 1982. Literature review. v. 2. p. 303-322. Includes references. (NAL Call No.: QP141.A1A63).

### 1568

Prevention and therapy of diabetes mellitus. Arky, R.A.NUREA. Washington, D.C.: Nutrition Foundation. Abstract: Specific aspects of the hyperglycemic syndromes with reference to etiology, prevention and therapy are summarized. Included are the most commonly encountered forms: insulin-dependent diabetes mellitus (IDDM or Type 1), non-insulin dependent diabetes mellitus (NIDMM or Type 2) and gestational diabetes mellitus. The interplay of genetics and environmental forces present complexities with regard to prevention of IDDM. However, the role of immunological processes provide optimism for ultimate preventive measures. Dther types of diabetes clinicians encounter also are described. (kbc). Nutrition reviews. June 1983. Literature review. v. 41 (6). p. 165-173. Includes 50 references. (NAL Call No.: 389.8 N953).

# 1569

Protein metabolism and injury (Increase in urinary nitrogen).

Kinney, J.M. Elwyn, D.H. Palo Alto: Annual Reviews. Annual review of nutrition. 1983.

Literature review. v. 3. p. 433-466. Includes

references. (NAL Call No.: QP141.A1A63).

### 1570

biochemical studies (Liver, blood, adrenals, gonads).

Counsell, R.E. Korn, N. Boca Raton, Fla.: CRC Press, c1982. Receptor-binding radiotracers / editor, William C. Eckelman. Literature review. p. 147-162. ill. 49 ref. (NAL Call No.:

Radioiodinated cholesterol as a radiotracer in

### 1571

QP519.9.R28R4 V.1).

Recent trends in carbohydrate consumption. Anderson, T.A. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 113-132. ill. Includes references. (NAL Call No.: QP141.A1A63).

# 1572

The relations of alcohol and the cardiovascular system.

Klatsky, A.L. Palo Alto: Annual Reviews.

Annual review of nutrition. 1982. Literature review. v. 2. p. 51-71. Includes references.

(NAL Call No.: OP141.A1A63).

Requirements related to physical activity and

### 1573

inactivity. Nelson, Ralph A. New York : A.R. Liss, 1981. Abstract: Physiologic stimuli and pathophysiologic evidence of disease producing changes in the physical and laboratory findings for patients can affect their nutrient requirements for both physically-active and -inactive states. The effects of such physiologic stimuli and pathophysiologic evidence of disease on some nutrients that may or may not call for nutrient intake modifications are discussed. Useful clinical tests and signs that assist in determining nutrient requirements are also described. Attention is given to requirements related to physical activity (calories, protein, vitamins), as well as to misconceptions of nutrient requirements for exercise (concerningg calories, protein, vitamins, trace elements, and semi-starvation) and to energy requirements and muscle diseases (with respect to carnitine deficiency). It is concluded that clinical nutritionists should be aware of those factors which modify requirements and make necessary appropriate adjustments. (wz). Nutrition in the 1980's-- the constraints on our knowledge. Literature review. P. 153-160. charts. Includes 12 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

Research technique for epidemiologic investigation of nutrition and cancer. Moore, Joan V.NUCAD. Prestridge, Laurel L.; Newell, Guy R. Philadelphia: Franklin Institute Press. Extract: There is evidence that diets may be stable over time due to deep-rooted habits; however, changes in eating behavior often are associated with life-syle or health-status changes. By using a diet-related life-event schedule, dietary changes resulting from life events may be more easily recalled and a more accurate characterization of diet patterns during neoplasm initiation may be made. (author/kbc). Nutrition and cancer. 1982. Literature review. v.3 (4). p. 249-256. charts. Includes 66 references. (NAL Call No.: RC262.C5N8).

# 1575

Toward a psychology of obesity: Review of research on the role of personality and level of adjustment.

McReynolds, William T. New York, Van Nostrand Reinhold. Abstract: Studies relevant to the psychoneurotic and psychosomatic theories of obesity are reviewed, with specific emphasis on the former. Reflecting fundamental differences in obese populations and methodologies, the relevant studies are considered according to 1 of 3 classes of obese persons examined: 1) assessment of psychogenic factors in obese psychiatric and psychosomatic clinic patients; 2) general medical and nutrition clinic patients; and 3) non-patient, non-help-seeking obese populations. It was concluded that obese psychiatric patients exhibit a full range of mental disorders, including neurotic and psychosomatic disturbances. Obese non-psychiatric patients fail to show a clear association between obesity and psychological disturbance. Non-patient obese students and workers show few signs of psychological disturbance and have relatively few instances of diagnosable mental disorders. While the research reviewed does not support a psychology of obesity formalized on psychoneurotic and psychosomatic process, the relevance of other behavioral (and social) influences of energy intake and weight regulation justifies careful assessment. (wz). International journal of eating disorders. 1982. v. 2 (1). p. 37-57. 85 ref. (NAL Call No.: RA784.A115 F&N).

# 1576

Trace elements and teratology: an interactional perspective (Zinc, copper, manganese). Hurley, L.S. Keen, C.L.; Lonnerdal, B. New York: Plenum Press, c1982. Genetic toxicology: an agricultural perspective / edited by Raymond A. Fleck and Alexander Hollaender. Literature review. p. 189-199. 38 ref. (NAL Call No.: RA566.G44).

1577

Trace minerals and atherosclerosis. Mertz, Walter.FEPRA. Bethesda : The Federation. Extract: Although there is no evidence for a direct cause-effect relationship between mineral and trace element status and atherosclerosis in humans, many elements exert a strong influence on individual risk factors for cardiovascular disease (such as disorders of blood lipids, blood pressure, coagulation, glucose tolerance, and circulating insulin). Studies in humans and animals have shown that optimal intakes of elements such as sodium, magnesium, calcium, chromium, copper, zinc, and iodine can reduce individual risk factors. Some of these studies are consistent with the results of epidemiologic correlations. Influences of local geochemical environments and dietary practies can result in mineral and trace element imbalances with deficiencies of chromnium, iron, copper, zinc, selenium, and iodine being well-defined. Detection and correction of such imbalances in populations through diminishing individual risk factors might ultimately serve to reduce the incidence of atherosclerotic heart disease. (author/wz). Federation proceedings - Federation of American Societies for Experimental Biology. Sept 1982. Literature review. v. 41 (11). p. 2807-2812. charts. Includes 44 references. (NAL Call No.: 442.9 F31P).

# 1578

Xylitol and dental caries.

Makinen, K.K. Scheinin, A. Palo Alto: Annual Reviews. Annual review of nutrition. 1982. Literature review. v. 2. p. 133-150. ill. Includes references. (NAL Call No.: OP141.A1A63).

# 1579

Zinc and copper in human nutrition. Solomons, Noel W. New York : A.R. Liss, 1981. Abstract: Various factors involved in the nutriture of zinc and copper are reviewed for each of these 2 trace elements. These include: metabolism and homeostasis, absorption, distribution, excretion, biochemical and physiologic function, interactions with other nutrients, clinical signs of deficiency, primary and secondary deficiencies, nutriture assessment, dietary and ecologic considerations, bioavailability, and therapeutic and toxicologic considerations for oral and parenteral administration of the trace element. While much knowledge has been gained concerning these 2 trace elements, much still remains to be discovered. Attention to these nutrients in medical, surgical, and dietary management is essential to the care of hospitalized patients, since a variety of iatrongenic and pathologic factors predispose to secondary deficiencies of these minerals. Less is known of the biology of these minerals in normal human nutrition in infancy and in old age. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature

review. p. 97-127. ill., charts. Includes 97 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

### 1580

Zinc-responsive nightblindness in sickle cell anemia.

New York, Nutrition Foundation. Abstract: Abnormalities of zinc (Zn) metabolism have been identified in homozygous subjects with sickle cell anemia. Recent study of experimental Zn deficiency in animals showed a reduction in retinol dehydrogenase, a potential Zn-metalloenzyme which indirectly assists rhodopsin formation, the visual pigment of rods in the retina. Other recent studies demonstrated that certain nightblind patients wiith alcoholic cirrhosis and Zn deficiency improved their in-dark adptation in response to oral Zn supplementation. A further study evaluated dark adaptation in a group of sickle cell disease patients. The neutrophil Zn content (but not plasma Zn) was significantly lower for patients with impaired dark adaptation. Longitudinal follow-up patients supplemented with Zn acetate daily improved their in-dark adaptability. Indications are that Zn deficiency at the level of retinal tissue can be responsible for retinal dysfunction in nightblind sickle cell anemia patients. (wz). Nutrition reviews. June 1982. v. 40 (6). p. 175-177. 15 ref. (NAL Call No.: 389.8 N953).

# HOME ECONOMICS

# 1581

Chemistry of hydroxymethyl phosphorus compounds. I. Introduction. (Flame retardant cotton fabrics, flameproofing of cellulosics). Vail, S.L.TRUDA. Daigle, D.J.; Frank, A.W. Princeton: Textile Research Institute. Textile research journal. Nov 1982. Literature review. v. 52 (11). p. 671-677. 61 ref. (NAL Call No.: 304.8 T293).

# 1582

Chemistry of hydroxymethyl phosphorus compounds. II. Phosphonium salts (flame retardant cotton).

Frank, A.W.TRJDA. Daigle, D.J.; Vail, S.L. Princeton: Textile Research Institute. Textile research journal. Nov 1982. Literature review. v. 52 (11). p. 678-693. 125 ref. (NAL Call No.: 304.8 T293).

# 1583

Index / Cooperative Extension Service,
Institute of Agriculture and Natural Resources,
University of Nebraska.

1981. This publication is an Index of
publications available in the area of home
economics. Document available from: University
of Nebraska-Lincoln, Dept. of Agricultural
Communications, Lincoln, Nebraska 68583. 6 p.
(NAL Call No.: Not available at NAL.).(NAL Call
No.: HEG 75-00).

# **HUMAN PARASITOLOGY**

# 1584

Population biology of parasitic infections (Bacteria, fungi, helminths, protozoa, viruses, zoonoses).

May, R.M. New York: J. Macy, Jr. Foundation, c1981. The Current status and future of parasitology: report of the conference / edited by K.S. Warren and E.F. Purcell. Literature review. p. 208-235. ill. Includes references. (NAL Call No.: QL757.C87).

# PARASITES OF HUMANS - GENERAL AND MISCELLANEOUS

# 1585

The present status of the parasitology literature (Helminthology, protozoology, veterinary and medical aspects).
Warren, K.S. New York: J. Macy, Jr. Foundation, c1981. The Current status and future of parasitology: report of the conference / edited by K.S. Warren and E.F. Purcell. p. 142-154. Includes references. (NAL Call No.: QL757.C87).

# PARASITES OF HUMANS - INSECTS AND OTHER ARTHROPODS

# 1586

Literature references to mosquitoes and mosquito-borne diseases: 1983. I. Sollers-Riedel, H.MOSOA. Albany: American Mosquito Control Association. Mosquito news. Mar 1983. Bibliography. v. 43 (1). p. 96-112. (NAL Call No.: 421 M85).

# PARASITES OF HUMANS - HELMINTHS

# 1587

The role of immunology in studies of parasitic infections with special reference to schistosomiasis (Schistosoma spp., zoonoses). Mahmoud, A.A.F. New York: J. Macy, Jr. Foundation, c1981. The Current status and future of parasitology: report of the conference / edited by K.S. Warren and E.F. Purcell. Literature review. p. 184-207. ill. Includes references. (NAL Call No.: QL757.C87).

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# PARASITES OF HUMANS - PROTOZOA

# 1588

African trypanosomiasis (Trypanosoma (Trypanozoon) brucei).
Baker, J.R. Boca Raton, Fla.: CRC Press, 1982.
Parasitic zooneses / the editor(s), Leon Jacobs ... (et al.). Literature review. p. 121-139.
ill., maps. Includes references. (NAL Call No.: RC119.P32 V.1).

# **POLLUTION**

# 1589

Acid precipitation: a bibliography: a compilation of worldwide literature.

Oak Ridge, Tenn. Technical Information Center, U.S. Dept. of Energy Springfield, Va. available from NTIS 1983. Cover title ~"April 1983. ~DDE/TIC-3399 ~DE83008750 ~Includes index. iii, 514, 211 p.; 28 cm. (NAL Call No.: Z5322.A25A25).

# 1590

Acid rain: impacts on agriculture, 1975-1982 / searched by Sheldon Cheney.
Cheney, Sheldon Beltsville, Md. U.S. Dept. of Agriculture, National Agricultural Library 1983. Updates 81-29 ~January 1983 ~Includes index. 35 p.; 28 cm. -. (NAL Call No.: aZ5071.N3 no.83-18).

# 1591

Advances in methods and techniques for the identification of xenobiotic conjugates (Environmental fate of pesticides).
Paulson, G.D.CTOXA. Lamoureux, G.L.; Feil, V.J. New York: Marcel Dekker. Clinical toxicology. 1982/1983. Literature review. V. 19 (6/7). p. 571-608. Includes references. (NAL Call No.: RA1190.C5).

# 1592

Agricultural use of phosphorus in sewage sludge (Fertilizers, pollution).
Kirkham, M.B.ADAGA. New York: Academic Press.
Advances in agronomy. 1982. Literature review.
v. 35. p. 129-163. 6 p. ref. (NAL Call No.: 30

# 1593

AD9).

Air pollution and the ecology of plants (Alpine tundra).

Bonde, E.K. Flock, J.W.; Shushan, S. Boulder: The Institute. Occasional paper - Institute of Arctic and Alpine Research, University of Colorado. 1982. Literature review. 1982. (37). p. 101-112. 126 ref. (NAL Call No.: QC994.8.C6).

# 1594

significance of arsenical compounds in a heavily contaminated watershed. I. The fate and speciation of arsenical compounds in aquatic environments—a literature review.

Lemmo, N.V.JPFCD. Faust, S.D. New York: Marcel Dekker. Journal of environmental science and health. Part B. Pesticides, food contaminants, and agricultural wastes. 1983. Literature review. v. 18 (3). p. 335-387. ill. Includes

Assessment of the chemical and biological

references. (NAL Call No.: TD172.J61).

### 1595

Bacterial and biochemical tests for assessing chemical toxicity in the aquatic environment: a review.

Bitton, G.CCECA. Boca Raton: CRC Press. CRC critical reviews in environmental control - Chemical Rubber Company. 1983. Literature review. v. 13 (1). p. 51-67. ill. Includes references. (NAL Call No.: QH545.A1C7).

### 1596

Bacterial pollution from agricultural sources: a review.

Crane, S.R.TAAEA. Moore, J.A.; Grismer, M.E.; Miner, J.R. St. Joseph: The Society.

Transactions of the ASAE - American Society of Agricultural Engineers. May/June 1983.

Literature review. v. 26 (3). p. 858-866.

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Public access to online catalogs: a planning guide for managers / Joseph R. Matthews.

Matthews, Joseph R. Weston, Conn. Online, Inc. (1982). Includes index. ix, 345 p.: ill.; 28 cm. Bibliography: p. 321-330. (NAL Call No.: Z699.M375).

# 1678

Public relations and the rural library: a bibliography.

Quadri, N. Clarion: Center for the Study of Rural Librarianship, Clarion State College. Rural libraries. 1982. v. 2 (2). p. 103-124. (NAL Call No.: 2675.V7R8).

# 1679

Publications in biomedical and environmental sciences programs, 1981 / compiled and edited by: J.B. Moody.

Moody, J. B. (Janice B.). Oak Ridge, Tenn. Oak Ridge National Laboratory Springfield, Va. Available from National Technical Information Service 1982. "July 1982. ~"ORNL-5904. "Contract no. W-7405-eng-26 ~Includes indexes. vii, 248 p.; 28 cm. (NAL Call No.: Z5863.E57M6).

### 1680

Recreation research publications: bibliography 1961-1982 / compilers Herbert E. Echelberger and Donna Gilroy and George Moeller.
Echelberger, Herbert E.,; 1938-; Gilroy, Donna.; Moeller, George.& 1961-1982 recreation research publications. Washington, D.C. U.S. Dept. of Agriculture, Forest Service 1983. Cover title: 1961-1982 recreation research publications ~"January 1983. ~Includes indexes. ii, 94 p.; 28 cm. (NAL Call No.: aZ7514.F75R4).

# 1681

Resource list: energy conservation and alternative energy sources / prepared for Energy Conservation and Alternative Energy Sources Workshops for Texas Librarians; compiled by Julia Rholes ... (et al.). Rholes, Julia.& Energy conservation and alternative energy sources. (S.l. s.n.) 1981. "Funded by Texas Energy and Natural Resources Advisory Council. ~"September, 1981 reprinted December, 1981.". 391 p. in various pagings; 28 cm. (NAL Call No.: Z5853.P83R48).

# 1682

Review of literature relating to the modeling of soil temperatures based on meteorological factors / prepared by: Kent H. Sandefer, Richard E. Lund, Joseph M. Caprio. Sandefer, Kent H. Lund, Richard E.; Caprio, Joseph M. Houston AgRISTARS, Early Warning/Crop Condition Assessment Project Springfield, Va. for sale by National Technical Information Service 1981. AgRISTARS (Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing) is a joint program of the U.S. Dept. of Agriculture, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the Agency for International Development, and the U.S. Dept. of the Interior ~"July 1981. ~"NAS9-16007. ~Early warning and crop condition assessment EW-21-04124 ~Includes indexes. xi, 83 p. : ill. ; 28 cm. (NAL Call No.: Z5074.S7S36).

# 1683

A selected bibliography for surface coal mining environmental monitoring and reclamation / by: Lyle V.A. Sendlein, Hasan Yazicigil.
Sendlein, Lyle V. A. Yazlcigil, Hasan.
Springfield, Va. Available from National Technical Information Service 1982.
"DOE/ET/14146-1. ~At head of title: Coal Extraction and Utilization Research Center Southern Illinois University at Carbondale ~"January 1982. ~"Prepared for U.S. Dept. of Energy, Assistant Secretary of Energy Technology, Office of Coal Mining under contract no. DE-AC-22-80ET14146.". vii, 92 p.; 28 cm. (NAL Call No.: Z6738.C6546).

# (DOCUMENTATION)

# 1684

Studies on energy policy: a selected bibliography / Robert Goehlert. Goehlert, Robert. Monticello, Ill. Vance Bibliographies 1982. Cover title ~December 1982. 14 p.; 28 cm. -. (NAL Call No.: Z7164.E6G6).

# 1685

University of Hawaii at Manoa tropical and Pacific soils resource guide / compiled by Martha Chantiny and Janet Meserve Yasumatsu. Chantiny, Martha. Yasumatsu, Janet Meserve.& Tropical and Pacific soils resource guide. Honolulu, Hawaii University of Hawaii at Manoa Libraries 1983. Cover title ~"June 1983. ~Includes index. 78 p.; 28 cm. (NAL Call No.: Z5074.S7C45).

# LIFE SCIENCES

# 1686

Brain structure and its implication in metabolism in aging: A review.

Buschmann, MB Tank. AJCNA. Bethesda : American Society for Clinical Nutrition. Abstract: Since the brain is unique in coordinating all body organs and their functions, any alteration in brain structure has important implications for brain metabolism. This is especially true in the case of altered protein syntheses, which in turn, affects brain activity. Gross changes and cellular-level changes in the aging human brain are considered, along with the relevant body of literature concerning research using animal models. The noted increase in our national life expectancy because of improved health care and living standards is of no real benefit if the extended years include functional motor or sensory loss and senility. The pathologic condition known as presentlity affects the young, and accounts for 85% of US patients institutionalized with organic dementia. Normally-aged persons show the same qualitative cellular brain changes as those seen in senility and presentlity, with the only apparent difference being the greater number of cellular changes associated with pathologic states. Hence, the correlation between structural and metabolic changes and abnormal behavior is unknown. A relationship does exist, however, between morphologic changes of neuronal aging, protein composition, and behavior. (wz). American journal of clinical nutrition. Oct 1982. Literature review. v. 36 (4, Suppl.). p. 759-765. ill., charts. Includes 76 references. (NAL Call No.: 389.8 J824).

# 1687

Cancer risks associated with agriculture: epidemiologic evidence (Contact with chemical, physical, and biologic agents).
Blair, A. New York: Plenum Press, c1982.
Genetic toxicology: an agricultural perspective / edited by Raymond A. Fleck and Alexander Hollaender. Literature review. p. 93-111. 56 ref. (NAL Call No.: RA566.G44).

# 1688

Computerized chromatgraphic analysis (1970-Apr 83): (citations from the Engineering Index data base) / New England Research Application Center.

Springfield, Va. National Technical Information Service 1983. Report period covered: 1970-Apr 83 ~PB83-864199 ~Includes index ~NW 7526. 1 v. (various pagings); 28 cm. (NAL Call No.: Z5524.C55C6).

# 1689

Endangered species: concepts, principles, and programs: a bibliography / by Don A. Wood. Wood, Don A., 1940. (Tallahassee) Florida Game and Fresh Water Fish Commission 1981. "May 1981. ~Includes indexes. iii, 228 p.; 27 cm. (NAL Call No.: Z7994.W5W66).

### 1690

Genetic engineering, applications to agriculture: invited papers presented to a symposium held May 16-19, 1982, at the Beltsville Agricultural Research Center (BARC), Beltsville, Maryland / Lowell D. Owens, editor; organized by the BARC Symposium VII Committee; sponsored by the Beltsville Agricultural Research Center, Northeastern Region, Agricultural Research Service, United States Department of Agriculture.

Owens, Lowell D.; (Lowell Davis),; 1931.

Totowa, N.J. Rowman & Allanheld 1983. Spine title: BARC symposium 7. x, 327 p.: ill.; 24 cm. -. Includes bibliographies and indexes. (NAL Call No.: S494.5.G44G46).

# 1691

Palm tissue culture: state of the art and its application to the coconut / by A. Kovoor. Kovoor, A. Rome Food and Agriculture Organization of the United Nations 1981. Paper presented at the fifth session of the FAO Technical Working Party on Coconut Production, Protection and Processing, Manila, December 1979 ~AGPC/MISC/77. 69 p.: ill.; 28 cm. -. Bibliography: p. 62-69. (NAL Call No.: SB13.F6 no.30).

# 1692

Perspectives in hypertension : including an overview of the problem, pertinent research, abstracts and commentary : a desk reference. Camden, N.J. Consumer Nutrition Center, Campbell Soup Company (1982). Abstract: A review of literature highlights recent research and theories concerning hypertension (the most prevalent health problem in the US). Areas discussed are: definitions: prevalence: risks: diagnosis; predisposing factors; current research directions (kidneys, adrenals, sodium, obesity, nervous system, treatment); and recommendations. Abstracts and critiques of original research papers and review articles on hypertension include opposing viewpoints. Topics covered are: sodium and hypertension; obesity and hypertension; oral contraception, pregnancy and hypertenson; race and hypertension; drug therapy and treatment; treatment and management of hypertension; and calcium metabolism in hypertenstion. (rkm). Cover title. 28 p.; 22 cm. Bibliography: p. 25-28. (NAL Call No.: RC685. H8P45 F&N C-2414).

# (LIFE SCIENCES)

# 1693

Publications in biomedical and environmental sciences programs, 1981 / compiled and edited by: J.B. Moody.

Moody, J. B. (Janice B.). Oak Ridge, Tenn. Oak Ridge National Laboratory Springfield, Va. Available from National Technical Information Service 1982. "July 1982. ~"ORNL-5904. ~Contract no. W-7405-eng-26 ~Includes indexes. vii. 248 p.; 28 cm. (NAL Call No.: 25863.E57M6).

# 1694

The United States Food and Drug Administration--purpose, history and function / Janice Dee Gilbert. Gilbert, Janice Dee. Monticello, Ill. Vance Bibliographies 1982. Cover title ~"April 1982.". 13 p.; 28 cm. -. (NAL Call No.: Z7914.F63G54).

# 1695

Viruses as environmental carcinogens: an agricultural perspective (Retroviruses, herpesviruses, papovaviruses, hepatitis B virus).

Gardner, M.B. New York: Plenum Press, c1982. Genetic toxicology: an agricultural perspective / edited by Raymond A. Fleck and Alexander Hollaender. Literature review. p. 171-188. 67 ref. (NAL Call No.: RA566.G44).

# 1696

Walker's Mammals of the world.
Walker, Ernest P. (Ernest Pillsbury),
1891-1969. Nowak, Ronald M.; Paradiso, John L.
Baltimore Johns Hopkins University Press 1983.
Rev. ed. of: Mammals of the world. 3rd ed. 1975
~Includes indexes. 2 v. (1362 p.): ill.; 26
cm. Bibliography: v. 2, p. 1307-1362. (NAL Call
No.: QL703.W3 1983).

# HUMAN MEDICINE, HEALTH AND SAFETY

# 1697

Annotated bibliography of the literature pertaining to pest control (Pesticides, toxicity, hazards).

Stanley, E. Lawrence, Kan.: Association of Systematics Collections, c1981. Pest control in museums: a status report, (1980) / compiled and edited by S.R. Edwards, B.M. Bell, M.E. King, with additional contributions by R. Beauchamp ... (et al.). p. E-1-E-14. maps. (NAL Call No.: TH9041.P47).

# 1698

Ascomycetes: Eurotiales, Sphaeriales, and Dothideales (Fungi pathogenic towards humans and animals, taxonomy, description).

Vries, G.A. de. New York: Marcel Dekker.
Mycology series. 1983. Literature review. v. 3 (pt.A). p. 81-111. ill. Includes references. (NAL Call No.: QK600.S4).

### 1699

Ascomycetes: the dermatophytes (Fungi pathogenic towards humans and animals, description, epidemiology).
Howard, D.H. New York: Marcel Dekker. Mycology series. 1983. Literature review. v. 3 (pt.A). p. 113-147. ill. Includes references. (NAL Call No.: QK600.S4).

# 1700

Cardiovascular research: Decades of progress, a decade of promise.

Levy, Robert I.SCIEA. Moskowitz, Jay. Washington: American Association for the Advancement of Science, Abstract: Advances in cardiovascular research are reviewed. Cardiovascular disease is the major cause of all deaths (51.2%) in the US, but mortality has decreased more than 30% in the last 30 years with 60% of this decline recorded between 1970 and 1980. While there have been significant research achievements, research must continue in the areas of etiology and pathogenesis, validating potentially beneficial research hypotheses, along with the translation and dissemination of research results to health professionals. Atherosclerosis, or its cardiovascular sequelae processes can be controlled and treated if understood, and prevention initiated. (kbc). Science. July 9, 1982. v. 217 (4555). p. 121-129. ill. 68 ref. (NAL Call No.: 470 SCI2).

# 1701

The Central control of appetite.

Morley, John E. Levine, Allen S. Boston:
Little, Brown and Company. Abstract: Recent rapid advances in the understanding of neurotransmitters and their function in the central nervous system for appetite regulation

are reviewed. Areas discussed include: the anatomy of feeding; the role of nutrients as appetostats in appetite control; neurotransmitters (e.g., opioid peptides, neuropeptides, certain monoamines, benzodiazepines) and feeding; and appetite set-point theories. Biologic development processes have apparently generated a complex appetite control system, including redundant or accessory regulatory systems that exist to ensure a fail-safe system. Pharmacological evidence suggests that the central regulatory neurotransmitters for appetite control are arranged in a cascade system. Further, similarities between monoaminergic and peptidergic appetite control and central control of analgesia, body temperature, and gastric secretion suggest an overlap in the control of these related life-sustaining processes. Despite the improvement in the understanding of appetite control, the complexity of the mechanisms may frustrate the application of this knowledge to curing obesity. (wz). The Lancet. Feb 19, 1983. Literature review. v. 1 (8321). p. 398-401. ill. Includes 54 references. (NAL Call No.: 448.8 L22).

# 1702

Circulating cholesterol level and risk of death from cancer in men aged 40 to 69 years. International Collaborative Group. ~JAMAA. Chicago, American Medical Association. Abstract: The relationship between circulating cholesterol level and cancer mortality was studied over a 10-year period in 61,567 men (40-69 years) from 11 population studies in 8 countries. Men who died within 1 year of cholesterol determination had lower cholesterol levels than the rest of the men. This also was true of those who died within 2-5 and 6-10 years but was not as marked. Lung and colon cancer decedents generally exhibited no significant differences. These findings are consistent with the hypothesis that lower cholesterol levels in cancer decedents are due to the effect of undetected disease on cholesterol level. (kbc). JAMA : Journal of the American Medical Association. Dec 3, 1982. Literature review. v. 248 (21). p. 2853-2859. charts. Includes 39 references. (NAL Call No.: 448.9 AM37).

# 1703

Diet and atherosclerosis: Recommendations of a pediatrician.

Roy, Claude C. New York: A.R. Liss, 1981. Abstract: Atherosclerosis (AS) is the leading cause of death in Canada, but it cannot be ascribed to a single underlying factor. Overlapping major (hypercholesterolemia, hypertension, smoking) and minor (obesity, abnormal glucose tolerance test, physical inactivity, phychosocial tensions) risk factors in the same individuals, nonetheless, increase the probability of coronary artery disease (CAD). The role of pediatricians in preventing AS (or in altering its progression) extends far

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beyond the formulation of dietary recommendations. The concept of AS initiation by the appearance of fatty streak in the aortas of almost all children by age 10 (regardless of diet and CAD incidence) remains controversial. The complex diet-heart disease relationship has been studied through animal experiments and human epidemiology, but there are no simple connections between dietary cholesterol and saturated fat, serum lipids, and advanced AS. The important question is whether dietary recommendations should be made for all children or only for those identified as being at high risk. A set of 8 recommendations based on identified premises are presented as guidelines. (wz). Nutrition in the 1980's -- the constraints on our knowledge. Literature review. p. 391-396. charts. Includes 27 references. (NAL Call No.: OP141.A1W4 1980 F&N B3160).

# 1704

Effects of diet on blood clotting and platelet aggregation.

Renaud, S. Dumont, E.; Godsey, F.; McGregor, L.; Morazain, R. New York : A.R. Liss, 1981. Abstract: It appears that the study of platelet functions, relative to environmental factors associated with coronary heart disease (CHD), might be at least as relevant as the study of blood lipids in explaining CHD pathogenesis. Data from animal and human studies are reviewed. Such studies indicate that certain platelet functions (clotting activity and response to thrombin aggregation) are affected more markedly than serum lipids by the environmental factor most closely associated with CHD, i.e., saturated fat (SF) intake. Polyunsaturated fatty acids inversely related to the platelet functions are linolenic acids and those inversely related to serum cholesterol are linoleic acids. Calcium and alcohol intakes appear to partially inhibit the effect of SF on platelet functions, while not being consistently associated with blood lipid lowering; hence, platelets might be involved in the known protective effect of these intakes on CHD. Platelets may be the principal blood mediator between diet and CHD. (wlz). Nutrition in the 1980's -- the constraints on our knowledge. Literature review. p. 361-381. ill., charts. Includes 26 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

# 1705

Epithelial in vitro cell systems in carcinogenesis studies (Toxic chemicals studies).

Borek, C.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 284-290. ill. Includes references. (NAL Call No.: 500 N484).

# 1706

Genetic engineering, applications to agriculture: invited papers presented to a symposium held May 16-19, 1982, at the Beltsville Agricultural Research Center (BARC), Beltsville, Maryland / Lowell D. Owens, editor; organized by the BARC Symposium VII Committee; sponsored by the Beltsville Agricultural Research Center, Northeastern Region, Agricultural Research Service, United States Department of Agriculture.

Owens, Lowell D.; (Lowell Davis),; 1931.
Totowa, N.J. Rowman & Allanheld 1983. Spine title: BARC symposium 7. x, 327 p.: ill.; 24 cm. -, Includes bibliographies and indexes.

(NAL Call No.: \$494.5.644646).

# 1707

Immunology of hypersensitivity pneumonitis (Farmer's lung disease). Stankus, R.P.CRTXB. Morgan, J.E.; Salvaggio, J.E. Boca Raton: CRC Press. C R C critical reviews in toxicology. 1982. Literature review. v. 11 (1). p. 15-32. ill. Includes references. (NAL Call No.: RA1211.A1C7).

### 1708

Interactions of immune function with lipids and atherosclerosis.

Klurfeld, D.M.CRTXB. Boca Raton: CRC Press. CRC critical reviews in toxicology, 1983. Literature review. v. 11 (4). p. 333-365. ill. Includes references. (NAL Call No.: RA1211.A1C7).

# 1709

Mechanisms of toxic injury.
Bridges, J.W.ANYAA. Benford, D.J.; Hubbard,
S.A. New York: The Academy. Annals of the New
York Academy of Sciences. 1983. Literature
review. v. 407. p. 42-63. ill. Includes
references. (NAL Call No.: 500 N484).

# 1710

Medical bibliography in an age of discontinuity / by Scott Adams.

Adams, Scott, 1909. Chicago Medical Library
Association c1981. Includes index. xvii, 224 p.; 24 cm. (NAL Call No.: Z6659.5.A3).

# 1711

Metabolic properties of in Vitro systems (Toxicology technology).
Dipple, A.ANYAA. Bigger, C.A.H. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 26-33. Includes references. (NAL Call No.: 500 N484).

Mode of action of antifungal drugs (Medical mycology).

Medoff, G. Kobayashi, G.S. New York: Marcel Dekker. Mycology series. 1983. Literature review. v. 3 (pt.B). p. 325-355. ill. Includes references. (NAL Call No.: QK600.S4).

### 1713

Moderate amounts of alcoholic beverages and clinical nutrition.

McDonald, Janet. Oakland, Calif., Society for Nutrition Education. Abstract: Five clinical aspects of moderate alcohol intake are discussed through a review of the literature. The 5 aspects are: the effect of ethanol on nutrition absorption; alcohol use while on a low-sodium diet; alcohol consumption by diabetics; the relationship between alcohol use and heart disease; and alcohol consumption during old age and confinement. Discussion stresses the proper definition of moderate consumption and suggests ways to quantify it. (kbc). Journal of nutrition education. June 1982. v. 14 (2). p. 58-60. charts. 37 ref. (NAL Call No.: TX341.J6).

# 1714

Mucorales (Fungi pathogenic towards humans and animals, identification, taxonomy description). Scholer, H.J. Muller, E.; Schipper, M.A.A. New York: Marcel Dekker. Mycology series. 1983. Literature review. v. 3 (pt.A). p. 9-59. ill. Includes references. (NAL Call No.: QK600.S4).

# 1715

Mutation systems in cultured mammalian cells (Toxic chemical testing).
Chu, E.H.Y.ANYAA. New York: The Academy.
Annals of the New York Academy of Sciences.
1983. Literature review. v. 407. p. 221-230.
Includes references. (NAL Call No.: 500 N484).

# 1716

NMR: appliations (sic) in medical diagnosis (1977 - Aug 82) : (citations from the Inspec data base).

Springfield, Va. NTIS 1982. "PB82-873662. ~"Report period covered: 1977-Aug 82. ~Includes index. 61 leaves in various foliations; 28 cm. (NAL Call No.: Z6675.A8N7).

# 1717

Obesity: Does it modulate infectious disease and immunity.

Edelman, Robert. New York: A.R. Liss, 1981. Abstract: The little known interaction of morbid obesity, hyperlipidemia, and dietary fats with infectious agents and immunocompetent cells (ICs) is reviewed and assessed. Studies specially considered include the interrelationships of lipids and infections in animals and humans, the influence of lipids in immune function, and the special case of obesity. Obesity, high-fat diets, and excess lipids interact with infectious agents and ICs in several ways; resistance to some infectious and autoimmune diseases are enhanced by high fat diets to inbred mice. It is known that the potential for surgical wound infections in obese humans is increased while tubercular death risk was decreased; in mice fed saturated fatty acids (coconut oil), conclusive data on the interaction of lipids and autoimmune disease, however, do not exist. Certain fatty acids (and cholesterol) are strong modulators of T-lymphocyte and phagocyte functions in test animals and in vitro leukocyte cultures. In humans, however, immune function modulation by dietary lipids remains uncertain. (wz). Nutrition in the 1980's--the constraints on our knowledge. Literature review. p. 327-337. Includes 65 references. (NAL Call No.: QP141.A1W4 1980 F&N B3160).

### 1718

Poisonous fungi: mushrooms (Toxicity towards humans, clinical treatment).

Vergeer, P.P. New York: Marcel Dekker.

Mycology series. 1983. Literature review. v. 3
(pt.B). p. 373-412. ill. Includes references.
(NAL Call No.: QK600.S4).

# 1719

Poisonous fungi: mycotoxins and mycotoxicoses (Clinical symptoms in humans and animals). Ciegler, A. Burmeister, H.R.; Vesonder, R.F. New York: Marcel Dekker. Mycology series. 1983. Literature review. v. 3 (pt.B). p. 413-469. Includes references. (NAL Call No.: OK600.S4).

# 1720

Prevention and therapy of diabetes mellitus. Arky, R.A.NUREA. Washington, D.C.: Nutrition Foundation. Abstract: Specific aspects of the hyperglycemic syndromes with reference to etiology, prevention and therapy are summarized. Included are the most commonly encountered forms: insulin-dependent diabetes mellitus (IDDM or Type 1), non-insulin dependent diabetes mellitus (NIDMM or Type 2) and gestational diabetes mellitus. The interplay of genetics and environmental forces present complexities with regard to prevention of IDDM. However, the role of immunological

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processes provide optimism for ultimate preventive measures. Other types of diabetes clinicians encounter also are described. (kbc). Nutrition reviews. June 1983. Literature review. v. 41 (6). p. 165-173. Includes 50 references. (NAL Call No.: 389.8 N953).

# 1721

Publications in biomedical and environmental sciences programs, 1981 / compiled and edited by: J.B. Moody.

Moody, J. B. (Janice B.). Oak Ridge, Tenn. Oak Ridge National Laboratory Springfield, Va. Available from National Technical Information Service 1982. "July 1982. ~"ORNL-5904. ~Contract no. W-7405-eng-26 ~Includes indexes. vii, 248 p.; 28 cm. (NAL Call No.: Z5863.E57M6).

# 1722

Role of calcium in cytotoxic injury of cultured hepatocytes (Toxicity studies).

Acosta, D.ANYAA. Sorensen, E.M.B. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 78-92. ill. Includes references. (NAL Call No.: 500 N484).

# 1723

The role of Neurospora in evaluating environmental chemicals for mutagenic activity (Toxicity studies).

Serres, F.J. deANYAA. Malling, H.V. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 177-185. Includes references. (NAL Call No.: 500 N484).

# 1724

The Salmonella mutagenicity assay: promises and problems (Ames toxicity testing).
Prival, M.J.ANYAA. New York: The Academy.

Prival, M.J.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. \$54-163. Includes references. (NAL Call No.: 500 N484).

# 1725

Screening of toxic compounds in mammalian cell cultures.

Ekwall, B.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 64-77. ill. Includes references. (NAL Call No.: 500 N484).

# 1726

Short-term tests in the framework of carcinogen risk assessment to man (Toxic chemicals testing).

Kroes, R.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 398-408. Includes references. (NAL Call No.: 500 N484).

# 1727

The significance of DNA-damage assays in toxicity and carcinogenicity assessment.

Kohn, K.W.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983.

Literature review. v. 407. p. 106-118. Includes references. (NAL Call No.: 500 N484).

# 1728

Trace minerals and atherosclerosis. Mertz, Walter.FEPRA. Bethesda : The Federation. Extract: Although there is no evidence for a direct cause-effect relationship between mineral and trace element status and atherosclerosis in humans, many elements exert a strong influence on individual risk factors for cardiovascular disease (such as disorders of blood lipids, blood pressure, coagulation, glucose tolerance, and circulating insulin). Studies in humans and animals have shown that optimal intakes of elements such as sodium, magnesium, calcium, chromium, copper, zinc, and jodine can reduce individual risk factors. Some of these studies are consistent with the results of epidemiologic correlations. Influences of local geochemical environments and dietary practies can result in mineral and trace element imbalances with deficiencies of chromnium, iron, copper, zinc, selenium, and jodine being well-defined. Detection and correction of such imbalances in populations through diminishing individual risk factors might ultimately serve to reduce the incidence of atherosclerotic heart disease. (author/wz). Federation proceedings - Federation of American Societies for Experimental Biology. Sept 1982. Literature review. v. 41 (11). p. 2807-2812. charts. Includes 44 references. (NAL Call No.: 442.9 F31P).

# 1729

The use of cells from rat, mouse, hamster, and rabbit in the hepatocyte primary culture DNA-repair test (Toxicity studies).

McQueen, C.A.ANYAA. Williams, G.M. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 119-130. Includes references. (NAL Call No.: 500 N484).

The versatility of Drosophila melanogaster for mutagenicity testing (Toxic chemicals). Valencia, R.ANYAA. New York: The Academy. Annals of the New York Academy of Sciences. 1983. Literature review. v. 407. p. 197-207. Includes references. (NAL Call No.: 500 N484).

# 1731

Zinc-responsive nightblindness in sickle cell anemia.

New York, Nutrition Foundation. Abstract: Abnormalities of zinc (Zn) metabolism have been identified in homozygous subjects with sickle cell anemia. Recent study of experimental Zn deficiency in animals showed a reduction in retinol dehydrogenase, a potential Zn-metalloenzyme which indirectly assists rhodopsin formation, the visual pigment of rods in the retina. Other recent studies demonstrated that certain nightblind patients wiith alcoholic cirrhosis and In deficiency improved their in-dark adptation in response to oral Zn supplementation. A further study evaluated dark adaptation in a group of sickle cell disease patients. The neutrophil Zn content (but not plasma Zn) was significantly lower for patients with impaired dark adaptation. Longitudinal follow-up patients supplemented with In acetate daily improved their in-dark adaptability. Indications are that In deficiency at the level of retinal tissue can be responsible for retinal dysfunction in nightblind sickle cell anemia patients. (wz). Nutrition reviews. June 1982. v. 40 (6). p. 175-177. 15 ref. (NAL Call No.: 389.8 N953).

# PHYSICAL SCIENCES

# 1732

Annotated bibliography of the geology of North Dakota, 1960-1979 / by Mary Woods Scott.
Scott, Mary Woods. (Grand Forks, N.D.) North Dakota Geological Survey 1981. Includes index. iii, 287 p.; 28 cm. -. (NAL Call No.: Z6034.U5N9).

# 1733

Geographic research in the U.S. Geological Survey: bibliography, 1966-1980 / by Mary E. Graziani.

Graziani, Mary E. (Reston, Va.?) U.S. Dept. of the Interior, Geological Survey Alexandria, VA Free on application to Distribution Branch, Text Products Section, U.S. Geological Survey 1982. Includes indexes. 59 p.; 26 cm. -. (NAL Call No.: Z6001.G7).

# 1734

User guide to the bibliography and index of geology / edited by John Mulvihill.
Mulvihill, John. Falls Church, Va. American Geological Institute c1982. Includes index. 160 p.; 23 cm. (NAL Call No.: Z6031.M84).

# **CHEMISTRY**

# 1735

Beltsville Symposium VIII: agricultural chemicals of the future, May 16-19, 1983, abstracts, Poster Session, May 16, 1983, Nat. Agricultural Library 3:00-5:00 P.M. (Washington, D.C.? s.n.) 1983. 58 abstracts listed ~Cover title. (10) p.; 28 cm. -. (NAL Call No.: Z5074.C484 1983).

# 1736

Review of literature on herbicides, including phenoxy herbicides and associated dioxins / prepared for contracting officer's technical representative, Barclay M. Shepard; submitted by JRB Associates.

Washington, D.C. Dept. of Medicine and Surgery, Veterans Administration (For sale by Supt. of Docs, U.S. G.P.O.) 1981. "October 1981"--P. 4 of cover ~"VA contract number: V101(93)P-823". 2 v.: ill.; 28 cm. Includes bibliographies. (NAL Call No.: Z6724.C5R48).

# **TECHNOLOGY**

# 1737

AgRISTARS documents tracking list report /

prepared by J.L. Hawkins. Hawkins, J. L. Houston, Tex. Lyndon B. Johnson Space Center, NASA 1981. AgRISTARS (Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing) is a joint program of the U.S. Dept. of Agriculture, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the Agency for International Development, and the U.S. Dept. of the Interior ~Lockheed Engineering and Management Services Company for National Aeronautics and Space Administration under Contract NAS 9 - 15800 ~Job order 70-223 ~AP-L1-04116 (Third ed.)~"September 1981. ~"October 1981"--Cover. 1 v. (various pagings); 28 cm. (NAL Call No.: Z6004.R38H38 1981).

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Hawkins, J. L. Houston, Tex. Lyndon B. Johnson Space Center, NASA Springfield, Va. for sale by National Technical Information Service 1982. AgRISTARS (Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing) is a joint program of the U.S. Dept. of Agriculture, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the Agency for International Development, and the U.S. Dept. of the Interior ~Lockheed Engineering and Management Services Company for National Aeronautics and Space Administration under Contract NAS 9 - 15800 ~Job order 70-223 ~AgRISTARS program documentation AP-L2-04116 (Sixth ed.)~"December 1982.". 1 v. (various pagings); 28 cm. (NAL Call No.: Z6004.R38H38 1982).

# 1739

An annotated bibliography of introductory articles to aid in the selection of small computer systems / Lynne Rosenthal, John Barkley.

Rosenthal, Lynne. Barkley, John. Washington, D.C. U.S. Dept. of Commerce, National Bureau of Standards, Institute for Computer Sciences and Technology, Center for Programming Science and Technology 1982. "Issued October 1982. ~ "August 1982. ~PB83-134502. 14 p.; 28 cm. -. (NAL Call No.: Z5643.M54R6).

# 1740

Laser techniques for extreme ultraviolet spectroscopy (Boulder, 1982) / editors, T.J. McIlrath and R.R. Freeman. McIlrath, T. J.; (Thomas J.); Freeman, R. R.; (Richard R.). New York American Institute of Physics 1982. Based on papers presented at the Topical Meeting on Laser Techniques for Extreme Ultraviolet Spectroscopy, March 8-10, 1982,

Boulder, Colo. and sponsored by the Optical Society of America and Air Force Office of Scientific Research, 497 p.: ill.; 25 cm. Includes bibliographies. (NAL Call No.: QC1.A43 no.90).

# 1741

NMR: appliations (sic) in medical diagnosis (1977 - Aug 82) : (citations from the Inspec data base).

Springfield, Va. NTIS 1982. "PB82-873662. ~"Report period covered: 1977-Aug 82. ~Includes index. 61 leaves in various foliations; 28 cm. (NAL Call No.: Z6675.A8N7).

# 1742

Review of literature relating to the modeling of soil temperatures based on meteorological factors / prepared by: Kent H. Sandefer. Richard E. Lund, Joseph M. Caprio. Sandefer, Kent H. Lund, Richard E.; Caprio, Joseph M. Houston AgRISTARS, Early Warning/Crop Condition Assessment Project Springfield, Va. for sale by National Technical Information Service 1981. AgRISTARS (Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing) is a joint program of the U.S. Dept. of Agriculture, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the Agency for International Development, and the U.S. Dept. of the Interior ~"July 1981. ~"NAS9-16007. ~Early warning and crop condition assessment EW-21-04124 ~Includes indexes. xi, 83 p. : ill. ; 28 cm. (NAL Call No.: Z5074.S7\$36).

# 1743

Spectral-agronomic relationships of corn, soybean and wheat canopies / M.E. Bauer, C.S.T. Daughtry, and V.C. Vanderbilt. Bauer, M. E. (Marvin E.). Daughtry, C. S. T.; Vanderbilt, V. C. West Lafayette, Ind. Purdue University, LARS Springfield, Va. for sale by National Technical Information Service 1981. AgRISTARS (Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing) is a joint program of the U.S. Dept. of Agriculture, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the Agency for International Development, and the U.S. Dept. of the Interior ~"NAS 9-15466. ~Research conducted for United States National Aeronautics and Space Administration under contract NAS 9-15466 ~ "October 1981" -- Cover ~Supporting research SR-P1-04187 ~ "Reprint of ... paper in proceedings of International Colloquium on Signatures of Remotely Sensed Objects, Avignon, France, September 8-11, 1981."--p. (1). 17 p. : ill. ; 28 cm. -Includes bibliographical references. (NAL Call No.: SB185.5.B37).

Water conservation technology in textiles: state of the art / edited by David M. Hall, Warren S. Perkins, James C. Warman. Hall, David M.; Perkins, Warren S.; Warman, James C. Auburn, Ala. Auburn University, Water Resources Research Institute 1982. v, 62 p.: 111.; 28 cm. -. Includes bibliographical references. (NAL Call No.: TS1449.W37).

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# 1745

The Evolution of computers in dietetics: A review.

Youngwirth, Joni. JADAA. Chicago: The Association. Abstract: Literature on computer applications in dietetics demonstrates that information in this field can be managed by computer-based systems. The historical perspective discussed includes the Computer Assisted Menu Planning (CAMP) plus the development of several other systems. Computer applications (CA) in foodservice management include: inventory control/purchasing systems; forecasting; recipe adjustment; production control; tray assembly and delivery; and menu planning and printing. CA in clinical dietetics include: nutrient analysis; communications; and interviewing and counseling patients. As an instructional tool, the computer can assist in college education, dietetic internships, and continuing education, as well as dietary administration. (kbc). Journal of the American Dietetic Association. Jan 1983. Literature review. v. 82 (1). p. 62-67. Includes 135 references. (NAL Call No.: 389.8 AM34).

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Financial management training materials for local governments: an annotated bibliography / Pamela H. Rodgers.

Rodgers, Pamela H. Mississippi State, Miss. Southern Rural Development Center 1982. "This bibliography is a product of a Contractural agreement between the Southern Rural Development Center and the U.S. Department of Agriculture-Cooperative Research. ~Includes index. iv, 231 p.; 28 cm. -. (NAL Call No.: Z7164.L8R6).

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The impact of conditions in the municipal bond market on community services and facilities : a synthesis and annotated bibliography / Gerry H. Williams.

Williams, Gerry H. Mississippi State, Miss. Southern Rural Development Center (1982). "This synthesis and bibliography is a product of a contractural agreement between the Southern Rural Development Center and the U.S. Department of Agriculture--Cooperative Research funded under grant number 70-59-2281-1-2-133-1.". iii, 75 p.; 28 cm. -. Bibliography: p. (11)-70. (NAL Call No.: HG4952.W53).

# SOCIAL SCIENCES AND HUMANITIES

# 1748

American folk architecture : a selected bibliography / by Howard Wight Marshall ; with the assistance of Cheryl Gorn and Marsha Maquire.

Marshall, Howard Wright. Gorn, Cheryl.; Maguire, Marsha. (Washington, D.C.) American Folklife Center, Library of Congress 1981. xiii, 79 p.; 28 cm. -. (NAL Call No.: Z5944.U5M38).

### 1749

Behavioral treatment approaches to obesity: Successes with the nonretarded and retarded. Rotatori, Anthony F. Switzky, Harvey.; Fox, Robert. New York, Human Sciences Press. Abstract: Literature concerned with the treatment of obese non-retarded individuals is reviewed and the successful application of the treatment to retarded obese individuals is summarized. Weekly weight loss studies with the mentally retarded compared favorably to those with the non-retarded during the active treatment period; other studies reported that the mentally retarded continued weight losses 10-52 weeks thereafter. Weight reduction programs could be improved in a number of ways, including pre-treatment and post-treatment data taking and evaluation, and the establishment of individual ideal goal weights for each subject at the beginning of the treatment period. Research implications assessed included: psychosomatic complaints by the mentally retarded during a weight treatment program; the substantial variability in weight loss patterns for individuals; and evaluation of eating pattern changes during treatment. (wz). Obesity and metabolism. Fall 1981. v. 1 (3). p. 140-158. charts. 46 ref. (NAL Call No.: RC628.A1022 F&N).

# 1750

# Diet and juvenile delinquency.

Gray, Gregory E.NTDYA. Gray, Lorraine K. Annapolis : Nutrition Today, Inc. Abstract: Food choices may be responsible for antisocial behavior in young people, but scientific research does not support the theory. However, some recent books and reviews suggest that an association does exist between diet and juvenile delinquency. Hypoglycemia, food additives, food allergies, and nutritional deficiencies may be the problems. Official criminologists haven't accepted the nutritional and biochemical theories of criminal behavior, but the proponents of these theories have had impact on prisons, probation departments, and school systems. The testimony regarding effected changes are mostly anecdoted. Some proposed treatments, such as vitamin therapy pose a greater risk in themselves. (kbc). Nutrition today. May/June 1983. Literature review. v. 18 (3). p. 14-17, 20-22. ill. Includes 77 references. (NAL Call No.: RA784.N8).

# 1751

Policy studies on research and development: a selected bibliography / Robert Goehlert.
Goehlert, Robert. Monticello, III. Vance
Bibliographies 1983. Cover title ~"March
1983.". 9 p.; 28 cm. -. (NAL Call No.:
Z7161.G588).

### 1752

The profession and practice of landscape architecture: articles in "Landscape architecture" magazine, 1910-1981 / Bruce K. Ferguson.

Ferguson, Bruce K. Monticello, Ill. Vance Bibliographies 1982. Cover title ~"March 1982.". 13 p.; 29 cm. -. (NAL Call No.: SB469.L2).

# 1753

Retirement-planning and adjustment: a selected bibliography, 1970-1982 / by John J. Miletich. Miletich, John J. Chicago, III. CPL Bibliographies c1983. "July 1983. ~Includes indexes. v, 53 p.; 28 cm. -. (NAL Call No.: Z690.A1C62 no.117).

### 1754

Review of literature on herbicides, including phenoxy herbicides and associated dioxins / prepared for contracting officer's technical representative, Barclay M. Shepard; submitted by JRB Associates.

Washington, D.C. Dept. of Medicine and Surgery, Veterans Administration (For sale by Supt. of Docs, U.S. G.P.O.) 1981. "October 1981"--P. 4 of cover ~"VA contract number: V101(93)P-823". 2 v.: ill.; 28 cm. Includes bibliographies. (NAL Call No.: Z6724.C5R48).

# 1755

Toward a psychology of obesity: Review of research on the role of personality and level of adjustment.

McReynolds, William T. New York, Van Nostrand Reinhold. Abstract: Studies relevant to the psychoneurotic and psychosomatic theories of obesity are reviewed, with specific emphasis on the former. Reflecting fundamental differences in obese populations and methodologies, the relevant studies are considered according to 1 of 3 classes of obese persons examined: 1) assessment of psychogenic factors in obese psychiatric and psychosomatic clinic patients; 2) general medical and nutrition clinic patients; and 3) non-patient, non-help-seeking obese populations. It was concluded that obese psychiatric patients exhibit a full range of mental disorders, including neurotic and psychosomatic disturbances. Obese non-psychiatric patients fail to show a clear association between obesity and psychological

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disturbance. Non-patient obese students and workers show few signs of psychological disturbance and have relatively few instances of diagnosable mental disorders. While the research reviewed does not support a psychology of obesity formalized on psychoneurotic and psychosomatic process, the relevance of other behavioral (and social) influences of energy intake and weight regulation justifies careful assessment. (wz). International journal of eating disorders. 1982. v. 2 (1). p. 37-57. 85 ref. (NAL Call No.: RA784.A115 F&N).

# 1756

Urban parks and recreation in the United States, 1970-79: a bibliography / Robert C. Wendling. Wendling, Robert C. Monticello, Ill. Vance

Bibliographies 1981. Cover title. 30 p.; 28 cm. -. (NAL Call No.: Z6905.W4).

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